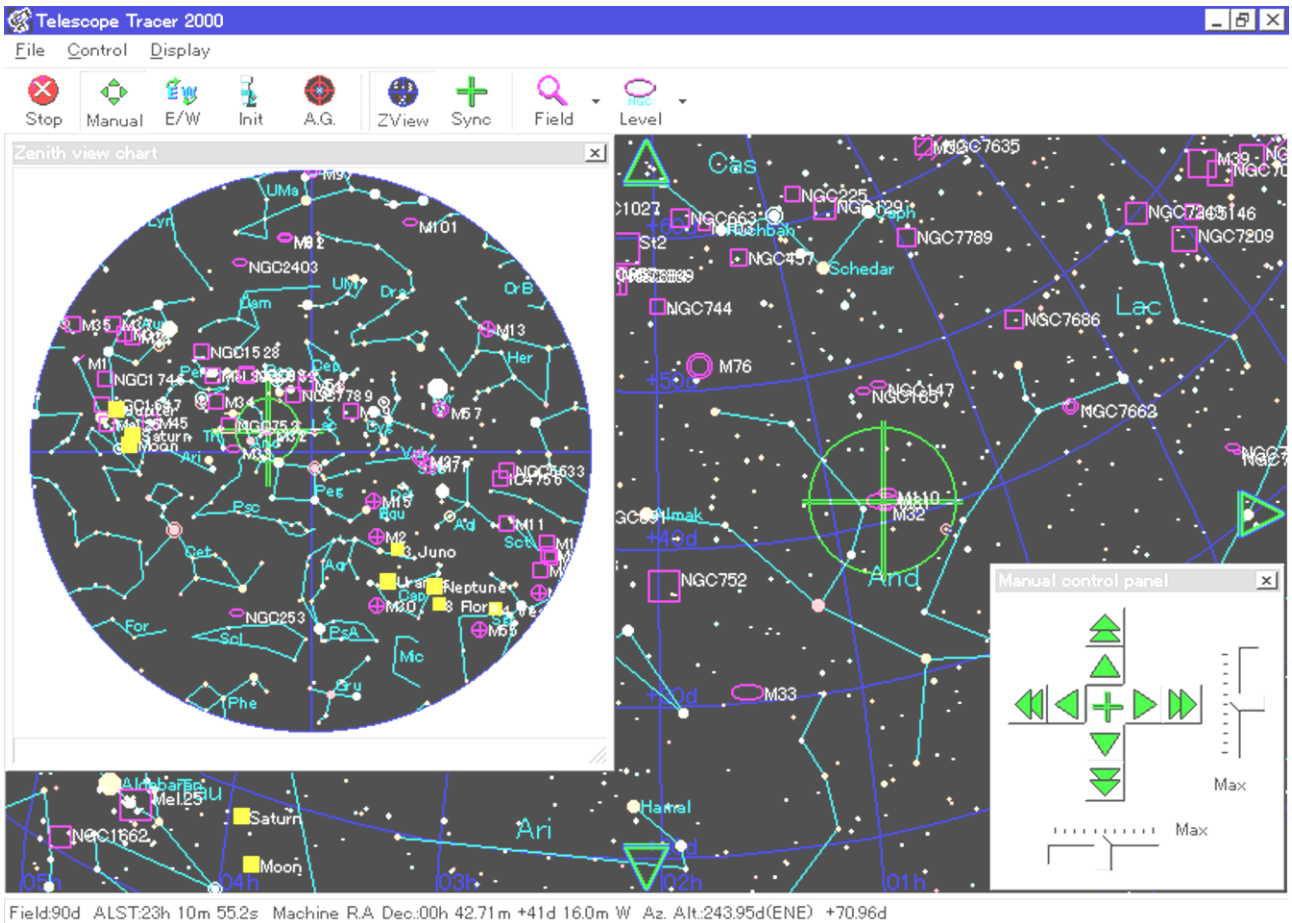




TELESCOPE TRACER 2000

# PEGASUS 21

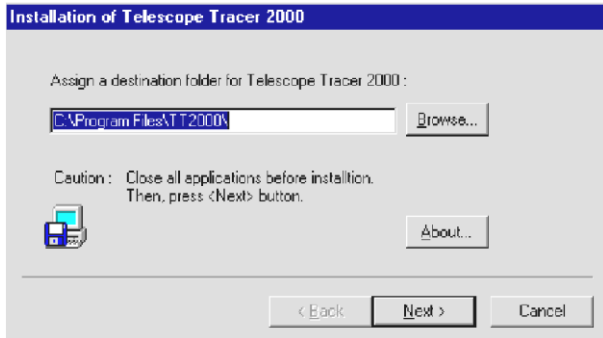
For TAKAHASHI TEMMA



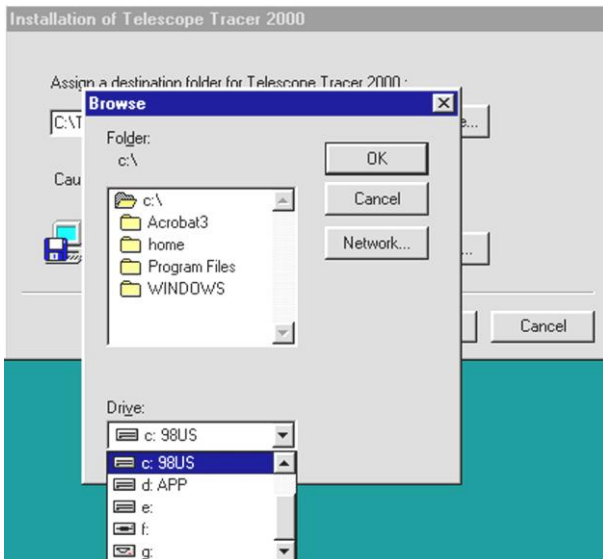
# TAKAHASHI

# INSTALLATION FOR [PEGASUS21]

Initiate the WINDOWS and set the disc [PEGASUS21] into the CD-ROM drive. In moments, the installer of [PEGASUS21] is actuated automatically.



1. Select the holder that [TT2000] is installed. In case it remains default, [TT2000] holder is automatically made and installed into the C drive.

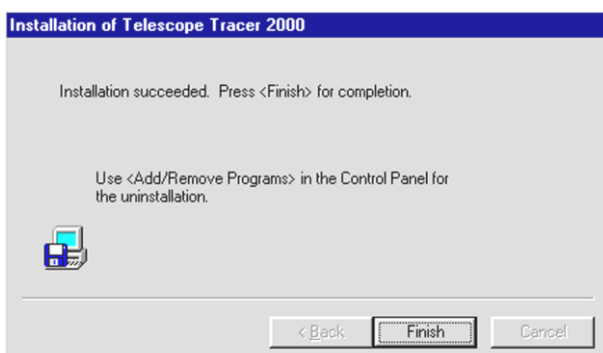


In case installation place is designated, left click [REFER- ENCE] and select any holder. Then, left click [OK].

When the installation place is fixed, left click [NEXT].



2. In case start menu is registered, make a check mark in the check box at the end of [REGISTER START MENU] by left click. In case short-cut icon is made in the desk-top, left click the check box of [MAKE SHORT-CUT IN THE DESK-TOP]. Left click [NEXT] and then installation begins.



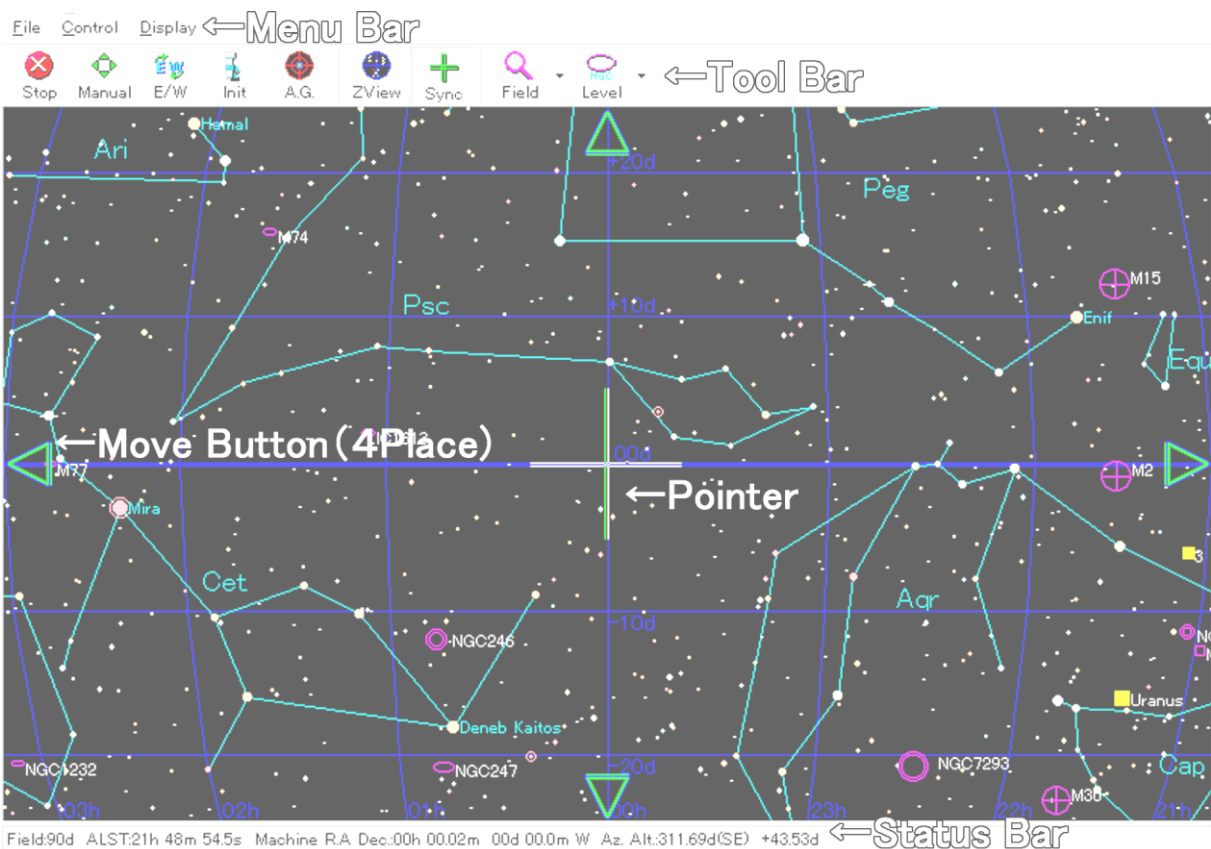
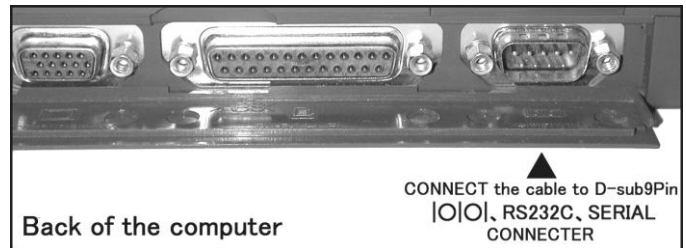
3. When the message [INSTALLATION IS COMPLETED] appears, left click [COMPLETE] and end it by left click [OK] in the next dialogue.

## [Reference]

- If the [PEGASUS21] installer did not actuate automatically, make the explorer initiated, showing the contents of DC-ROM drive and left click [INSTALL EXE] quickly twice and initiate the explorer.
- In case you like to stop the installation on the way, left click [CANCEL].
- When you like to delete [PEGASUS21] from the drive, be certain to make it with [ADD OR DELETE APPLICATIONS] on the control panel.

## How to Actuate PEGASUS21

1. Connect the Temma to a PC with the RS232C cable.
2. Switch the Temma on.
3. Switch the PC on and actuate the WINDOWS.
4. Left click the icon of PEGASUS21 quickly twice and actuate it.  
Then, the star map will appear on the monitor.

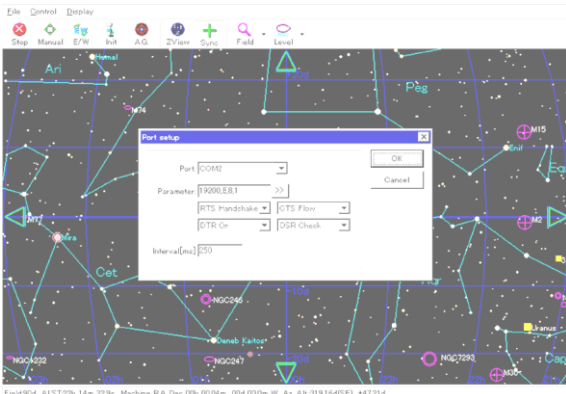


### [Caution]

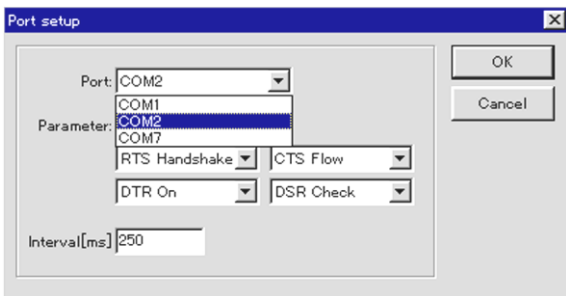
If the Temma does not communicate with PEGASUS21, the display of the status bar at the bottom will show "error".

# COMMUNICATION SETTING

After installation, make communication setting through RS232C cable in order to actuate PEGASUS21 and link the mount.



1. Click the [FILE (F)] of the menu bar and select [COMMUNICATION SETTING] in the pull-down menu by left click. Then, the window of the communication setting will open.



2. At first, set the COM port. Left click ▼ mark of the port window and display the port No. Then, let click the desired port.

[Caution] Usually the port is set at COM1 so that no change is necessary unless the RS232C is used for the other purpose. If the COM1 is used for the modem, set it at COM2.



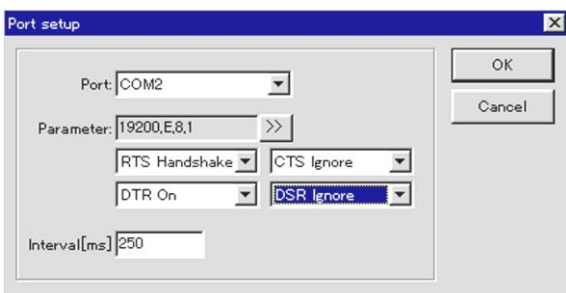
3. Setting has been made beforehand in the Temma.

New TEMMA, TEMMA-PC:19200bps

Old TEMMA:9600bps

EM2000:2400bps

Astro Scale:2400bps

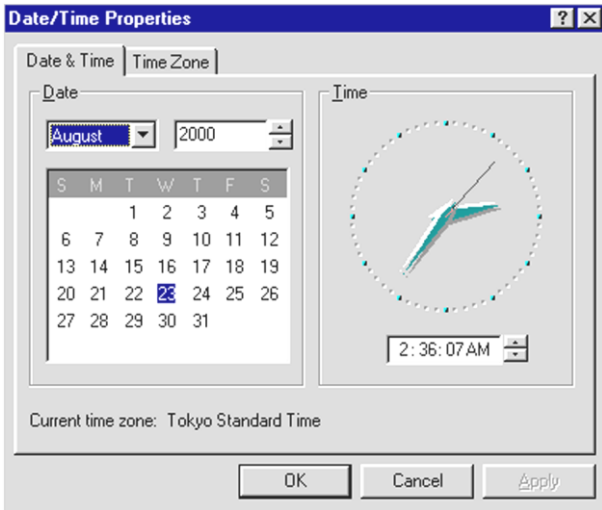


4. In case the communication with the Temma becomes error, change the CTS and DSR to [NEGLECT].

There will be some cases that a note PC could not be linked with Temma because the RS232C cable is allocated to infrared port. In such cases, change the setting of the RS232C, referring to the PC manual.

# INITIAL SETTING

When the link between the Temma and the PEGASUS21 is set up, make the initial setting with the following procedures

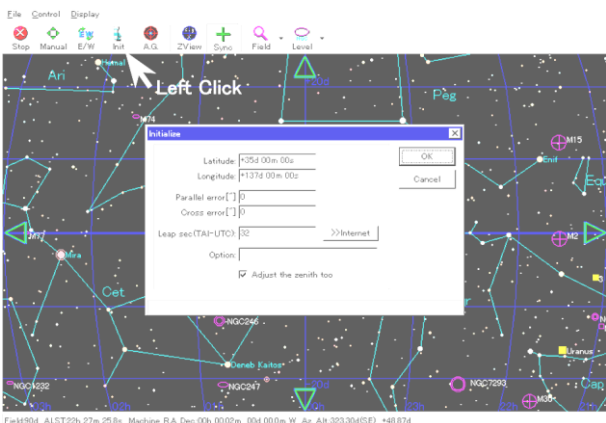


1. Set the hour and the date.

Right click, moving the mouse pointer on the clock and left click [ADJUSTMENT FOR THE DATE AND THE HOUR]. Left click [OK] after adjustment for the date and the hour.

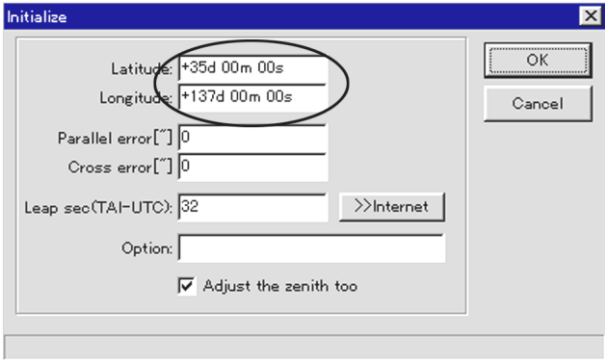


2. Point the telescope to the zenith in the west side toward the polar axis. (telescope west position)

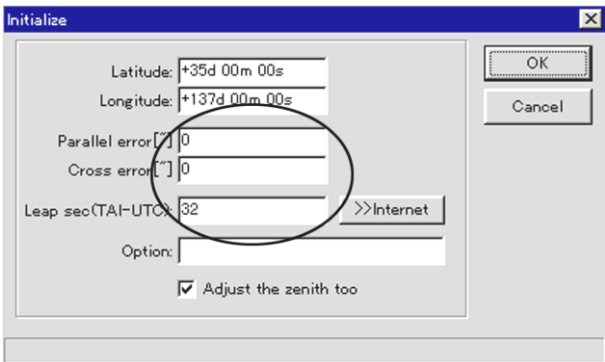


3. Left click [INITIAL SETTING] icon of the tool bar.

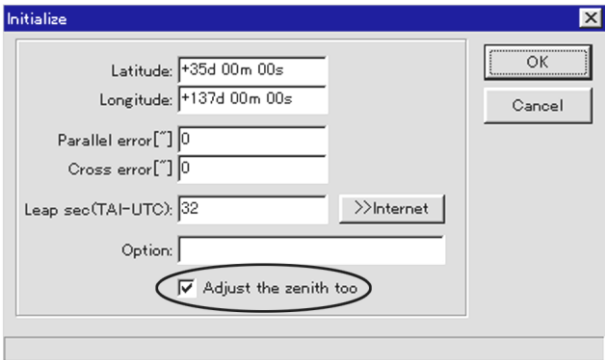
Then, the dialog of the initial setting will appear.



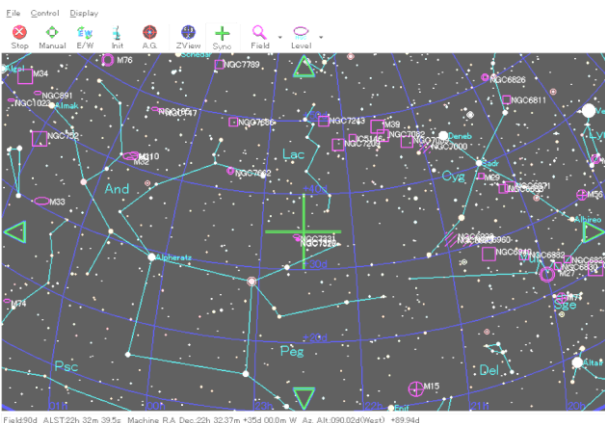
4. Input the R.A. and the Dec. of the observing site.  
 Set the mouse pointer at the right of the desired figure in the monitor and left click and delete the figure with [BS(back space)] key. Then, input the 1/2 figure. Attach [+] to the latitude north and longitude east and [-] to the latitude south and the longitude west.  
 d = degree, m = minute, s = second



5. Input parallel error as the parallel error of the telescope and the R.A. axis and the right angle error as the right angle error of the Dec. axis and the R.A. axis, using "(arc).



6. Left click the check box of the [DOING ZENITH SETTING AT THE SAME TIME] and make a check.

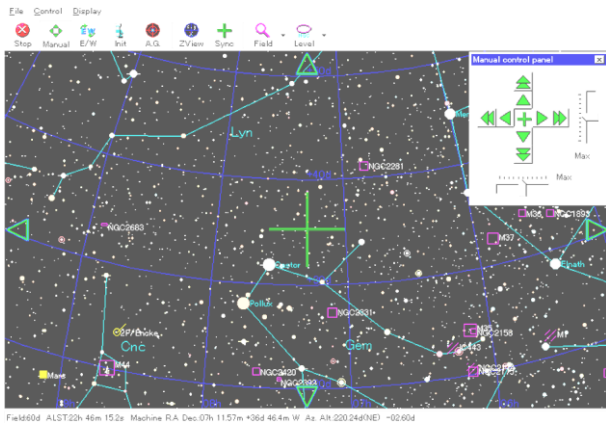


7. Left click [OK] and then end the initial setting. The sky map centering the zenith will appear and now the telescope is pointing the approximately same direction shown in the map.



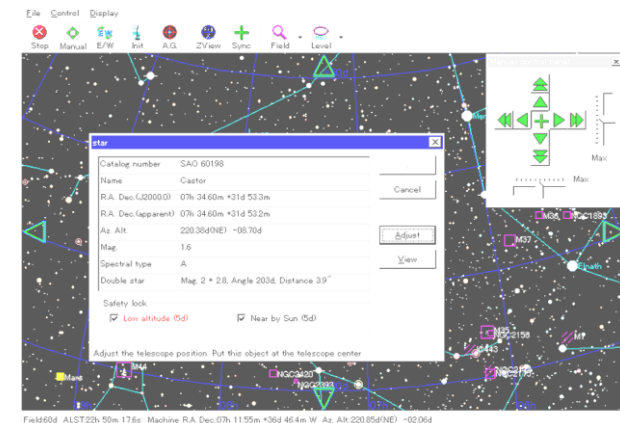
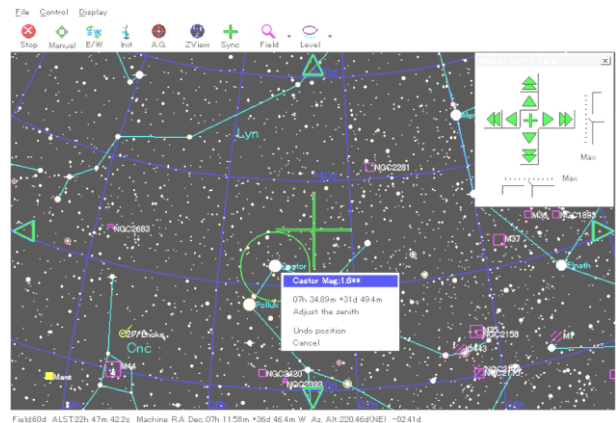
# POSTION SETTING FOR TEMMA

The telescope direction will be not always same with the pointer position on the star map just by initial setting. In order to be perfectly matched the both position, the following procedures are necessary.



1. Center a well-known star in the view field (more than 50x) by moving the telescope. Take the Castor in the Gemini, for example. On the star map, the pointer is not positioned on the Castor.

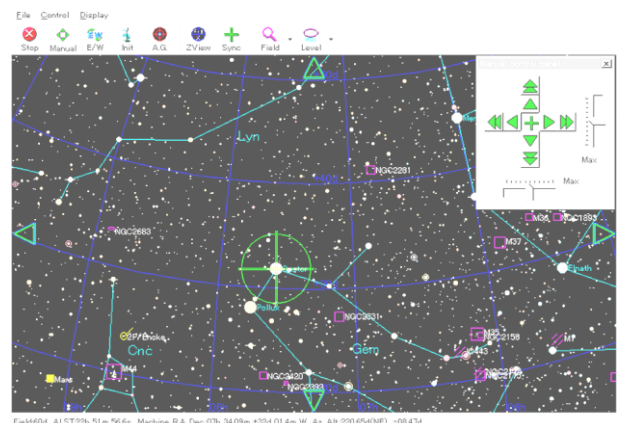
2. Next, position the mouse pointer on the Castor and left click. Then, the Castor is circled and the list of the neighboring objects is displayed.
3. Select the Castor among the list and left click.



4. Then, the information dialog of the Castor is displayed.
5. If the star is exactly same one which was selected. Left click the [SETTING POSITION] button below the right side of the dialog. If you like to stop doing the setting position, left click the [CANCEL].

6. Now the pointer on the map has been moved to the Castor, showing the direction of the telescope is just matched to the pointer.

[Note] If you notice an input error after the [SETTING POSITION] button has been pressed, left click the [CONTROL] in the menu bar [RETURN THE SETTING POSITION TO THE ORIGINAL POSITION].



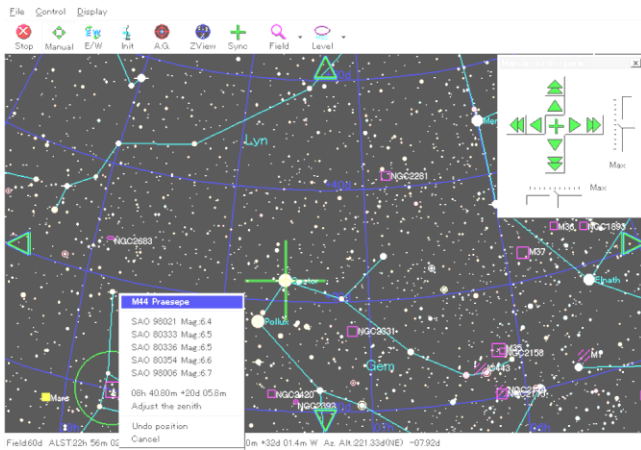


# HOW TO ACTUATE TEMMA GO-TO

Now let us try to do Temma Go-To. There are two methods.

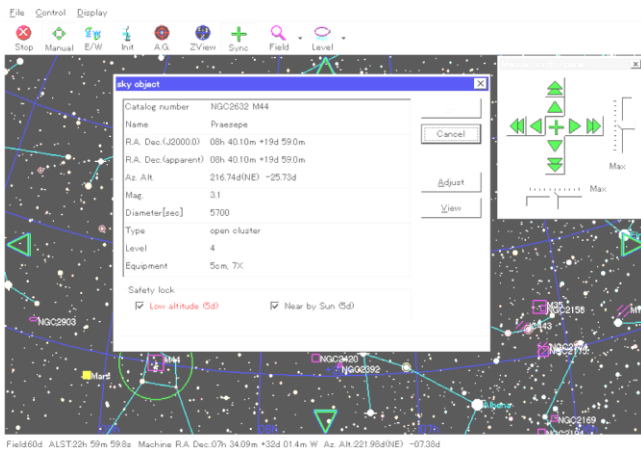
1. [Go-To by Star Map], designating a star by the mouse pointer.
2. [Go-To by RA/DEC], inputting the coordinates of the R.A. and Dec.

Take M44 (Praesepe, open cluster in the Cancer), for example, by [Go-To by Star Map].

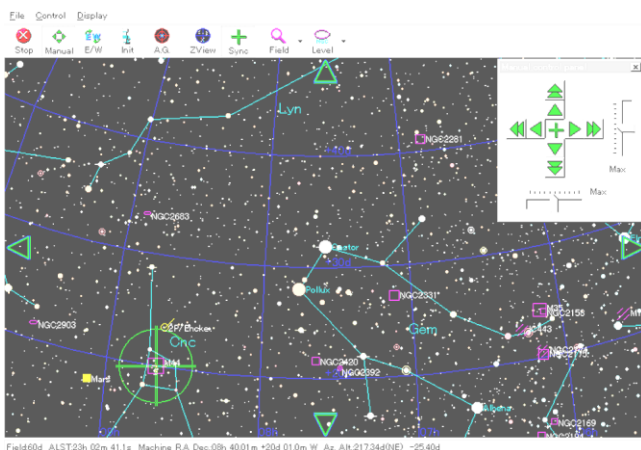


1. At first, move the mouse pointer just on the M44 and left click. Then, the list of the neighboring stars will appear.

\* If the desired star is not included in the list, move the mouse pointer again on the M44 and left click.  
\* The star map can be shifted by left clicking any one of the star map scroll button.



2. Left click the M44 in the list and then its information dialog is displayed. Be certain it is the M44 and let click the [Go-To] button at the right above.



3. Then, the telescope starts to move and the pointer on the map moves together toward the M44. When the pointer lays on the M44, Go-To is completed.

# SPECIFICATION

PEGASUS21 can do the introduction automatically, by clicking the celestial body on the star chart with the mouse.

PEGASUS21 inputs optional celestial body coordinate(RA,DEC) and can do the introduction automatically.

## *Screen Layout*

### **Epoch**

A.D. of 2000 years or when you observe

### **View**

180 degree (the horizon coordinate)

90 degree, 60 degree, 30 degree, 10 degree, 5 degree

The star chart is interlocking it with the telescope. Even the pointer on the star chart moves, when the telescope is moved. When the pointer, misses from the screen the star chart of the next area is displayed.

## *Data*

### **StarData:**

Magnitude Limit 9.5 (Conformance to the SAO)

any Variable stars, any Double Stars

### **Deep Sky Object**

Messie: 110, NGC: 7840, IC: 5382

### **The solar system**

The Sun, The Moon, The 8planet, any Comet, any Asteroid

### **Others**

Equatorial Grid, Constellation Lines

Constellation Name, main Star Name

## *Trademark*

Telescope tracer 2000 (PEGASUS21) is the product that ASADA PLANNING ROOM developed.

PEGASUS21 is the product that the Co., Ltd. TAKAHASHISEISAKUSYO is selling.

Windows, WindowsNT are trade mark of Microsoft Corporation.

Pentium is trade mark of Intel Corporation.