5 Encyclopedia Applications

The encyclopedia program contains basic astronomical information and other interesting science trivia. The encyclopedia is divided into five main categories: “Solar System”, “Constellation”, “Astro forecast”, “Telescope”, and “Science”. Touching the “Encyclopedia” icon from the Star menu (which is accessed from the main menu) will display these categories, as shown below.

You can explore the contents of each category by selecting it. **Solar System** Accesses text information and images for the Sun and planets. **Astro forecast** Provides information about upcoming meteor showers, solar eclipses, and lunar eclipses. **Telescope** Teaches about different types of telescopes, the history of telescopes, and telescope usage. **Science** Contains interesting science trivia. **Constellation** Choose this for astrological knowledge, this selection also contains several other fun astrological functions. These include:
**Astrology Glossary**
Introduces ancient Chinese Astrology.

**Lunar Mansions**
This function determines your astrological “lunar mansion” depending upon your birthday.

**All About Horoscopes**
Select your astrological birth sign, then choose one of the icons that appear at the bottom of the screen.
- “Personality”, “Love Attitude”, and “Work Attitude” will give your general horoscope and personality traits.
- “Mythology” provides ancient Greek mythology about the 12 constellations of the zodiac.
- “Start Star Hopper” will activate SynScan Tour's locating function to point to the selected constellation in your current sky.

**Personality Analysis**
This is a general “personality analysis” utility, it is based upon your birthday.
6 Media Player

Select the Media menu from the main menu to access SynScan Tour's audio player, image browser, and video player.

6.1 Audio Player

Touch the “Audio” button to show the available audio files. Choose among the different audio file category tabs at the top of the screen.

- Select “Others” to access audio files stored on an optional external SD card. MP3, WAV, and WMA file formats can be played.
- Select “Record” to show the audio files previously recorded with
SynScan Tour. (Refer to section 7.4. to learn how to record audio files.)

- Select “SkyInfo” to show all the celestial object presentation audio files in SynScan Tour's memory.
- Select “Search” to find an audio file with a specific file name. Use the virtual keyboard that pops-up to enter the name.

Choose an audio file to play by touching it onscreen. You can also choose an audio file by using the scroll wheel or up and down keys, then press the OK key. SynScan Tour will now play the audio file, and the display will look like this:

![Audio file player interface]

The “Repeat” and “Single” buttons determine what happens when the selected audio file is finished playing.

-- If neither the “Single” nor “Repeat” buttons are engaged, the music player will play the next audio file in the chosen list. It will stop playing once all audio files in the list are played.
-- If the “Single” button is engaged, the currently selected audio file will repeat continuously until the button is disengaged.
-- If the “Repeat” button is engaged, the music player will play all audio files in the chosen list continuously until the button is disengaged.
6.2 Image Browser

Touch the “Images” icon onscreen from the Media menu, then touch the “Galaxy Gallery” button to display a thumbnail list of astronomical images in SynScan Tour's memory, as shown below.

Touch the left and right arrows onscreen, or use the scroll wheel or left and right keys, to browse the thumbnail image list. Now, simply touch an image (or press the OK key) to display it. You can also touch the “play” button onscreen to start a slide show of all images. During the slide show, touch the play button to pause playing and view the currently displayed image. When viewing a single picture, use the scroll wheel to zoom into it, and use the direction keys to pan the picture within the display screen.

6.3 Video Player

Touch the “Video” icon onscreen to access the available video files contained on an optional external SD card.
Use the scroll wheel (or direction keys), or use the onscreen up and down arrows, to browse the list of available videos. Touch the file name (or press the OK key) to play it.
7. Tools
Select the Tools menu from the main menu, and the screen will display the following:

![Tools Menu]

7.1 Calculator
Select the “Calculator” button, to use the calculator tool, and the screen will look like shown below. The calculator functions just as you would expect, simply touch the onscreen buttons to use it.

![Calculator]

7.2 Notebook
Touch the “Notebook” button, and the notebook tool will open. The screen will look like this:
You can open, create, edit, and save files. Use the stylus to type using the virtual keyboard onscreen. The numbered box in the upper right corner of the screen changes the font size. You can move (i.e. “drag”) the keyboard within the display screen by touching the “Input Panel” bar above the keyboard.

7.3 Compass
Touch the “Compass” button, and the compass tool will appear on the display.

The compass uses SynScan Tour's internal sensors in to detect Earth's magnetic north pole, then finds true north based upon the current geographical location (which was input in the Settings
menu with the “Location” icon). To use the compass, simply hold SynScan Tour horizontally with its screen facing upwards. The compass' red needle will point to magnetic north, and the green needle just next to it points to true north.

7.4 Audio Recorder

Touch the “Audio Recorder” button to record audio files with SynScan Tour.

- Touch the “Rec.” button, or use the OK key, to start recording.
- Touch the “Stop” button, or press the OK key again, to stop recording.
- Touch the “Play” button to replay the audio, the “Pause” button pauses the replay.
- Touch the “Save” button to save the recorded audio file. The virtual keyboard will pop-up to let you to enter a name for the audio file.
- Touch the “New” button to clear the previously recorded audio file and start recording a new audio file.
There are two buttons on the right side of the screen. These buttons allow you to replay the recorded audio automatically upon motion-detected startup of SynScan Tour. Use this handy utility to leave voice messages for others. Once recording of your message is complete, touch the “Startup Audio” button at the right side of the screen, then touch the “Standby” button underneath it to place SynScan Tour into standby mode. SynScan Tour will then “wake up” from standby mode whenever someone walks by (motion is detected with the built-in IR sensor), and the recorded audio message will play automatically. It's fun and useful! SynScan Tour will return to standby mode after a few seconds. To exit standby mode, deselect the Standby button.

7.5 Feng Shui

Touch the “Feng Shui” button from the Tool menu, and the Feng Shui application will begin as shown below.

Two fortune telling utilities are available, choose Bagua or Personal Kua.
● Bagua utility
Touch the “Eight Diagram” box onscreen to start the Bagua utility. This function will help you determine the Feng Shui of a designated room or space. To use this utility, follow these steps:
Step 1. Stand at the center of the room, and hold SynScan Tour horizontally so that the display screen faces upwards.
Step 2. Rotate your body while holding SynScan Tour until the red needle in the display compass is pointed North in the Eight Diagram chart.
Step 3. Select one of the eight zones in the Eight Diagram chart (by touching it onscreen) to obtain Feng Shui advice about the corresponding direction of the room.

● Personal Kua utility
Touch the “Personal Kua” box to start this utility; this is a function that calculates your fortune based upon your birth date. Input your date of birth, and the utility will calculate your Bagua number (on the left side of the window) and Five Element alignment (on the right side of the window), like shown below.
Touch either of the icons onscreen to obtain more detailed information about your fortune.

Touch the “Info” tab at the upper left of the screen for some general information about Feng Shui.

Touching the “Orientations” tab at the upper right of the screen gives directional Feng Shui information based upon your own personal orientation (derived from the entered birth date), and suggests how to best utilize (or avoid!) each direction. To access the Feng Shui information for each of the eight directions, just touch one of the “lucky” or “worst” boxes within the onscreen compass.
8. Other Functions

8.1 StartUp/WakeUp Display

SynScan Tour can be setup to display an image each time it is powered on. The image is selected randomly from the images stored in SynScan Tour's internal memory.

SynScan Tour can also be put into a motion-detecting standby mode; it will “wake up” when something moves in front of its infrared (IR) sensor. The SynScan Tour can also play a specified audio or video clip when it wakes up.

Setting

From the main menu, touch the Setting menu, then the “System” icon. Choose “StartUp/WakeUp Display” from the pull-down selection menu, as shown below.

SynScan Tour will then display this screen:
Select the “Startup Display” check box, and SynScan Tour will display an image whenever it is powered on. The image is randomly chosen from the three categories under the “Startup Display” check box. Select or deselect these check boxes to include the specified image category in the startup image list. The startup image categories include:

■ User Saved
These image files should be stored in the “\Nandflash\Pictures” file location in SynScan Tour's memory.

■ Celestial Objects
These are the astronomical images in SynScan Tour.

■ Natural Science
These are interesting science comics, they're fun and informative!

Select the “Wakeup Display” check box, and SynScan Tour will play a video when it wakes up from standby mode. Select the video file by touching one of the four buttons under the “Wakeup Display” check box.
Touch the “User Saved Video” button onscreen to select a video that you saved in SynScan Tour's memory in the “\Nandflash\Videos” file location.

Touch the “Introduction” button to play an introduction video about SynScan Tour.

Touch the “Mount Control” button to play an introduction video about using SynScan Tour to control a telescope mount.

Touch the “Display Settings” button to play a video presentation about setting SynScan Tour's sky map display properties.

Select the “Repeat Play” check box to enable looping play of the video. Upon wake up, the video will repeat playing until the Cancel key is pressed.

To use the Wakeup Display function, follow these steps:

Select a video file to be played by selecting the corresponding button under the “Wakeup Display” check box.

Press SynScan Tour's power button, then touch the “Standby” icon onscreen.

Place SynScan Tour in a location where people will walk by.

Now, SynScan Tour will “wake up” and play the selected video when somebody moves in front of its IR sensor.

After the video finishes playing, SynScan Tour will ask whether it should enter standby mode again. After 15 seconds, SynScan Tour will automatically return to standby mode.

Press the Cancel key at any time to stop the video and return to normal operation.

8.2 Managing SynScan Tour's Data Storage

From the Setting menu, touch the “Files” icon onscreen. The following window will appear:
You can just touch a folder icon to open it, then use the touch screen tool bar to manage the files within the folder.

There are four folders within the NandFlash folder.
- Record: This is where audio files made with the “Audio Recorder” function are automatically stored.
- Music: Store music files you want SynScan Tour to play here. You can play these under the “Others” tab in the Audio Player.
- Pictures: Store image files you want to browse with SynScan Tour here.
- Videos: Store video files you want SynScan Tour to play here.

8.3 Connecting to a PC

You can also connect SynScan Tour to a PC running Windows to manage the files stored in SynScan Tour's memory. You'll need to download and install Microsoft ActiveSync 4.5 if the PC's operating system is Windows XP or earlier.

Follow these steps to establish connection to a PC:
- Power on SynScan Tour.
- Connect SynScan Tour to a PC with the supplied USB cable. One end of the cable goes into SynScan Tour's mini USB port, the other end goes into an available PC USB port.
- Open “My Computer” on the PC, and then double click the “Mobile Device” icon (for XP), or “Portable Device\Windows CE” icon (for Vista).
- Open the “NandFlash” folder to manage the files in SynScan Tour's memory.

### 8.4 Using Micro SD Cards

SynScan Tour can play audio/video files and browse images stored on an external micro SD card. Follow these steps to install a micro SD card into the SynScan Tour:

- Power off SynScan Tour, open the battery cover, and remove the battery.
- Insert the micro SD card into the card slot. The card should be oriented so its metal contacts connect with the metal pins in the card slot (you can see the pins through the cutouts in the card slot).
- Replace the battery and battery cover.

The files stored in the micro SD card can be managed with SynScan Tour directly or through a PC. Its folder will appear as “Storage Card” alongside the “NandFlash” folder.

### 8.5 Using USB Storage Devices

SynScan Tour can also play audio/video files and browse images from an external USB storage device, such as a USB thumb drive. Simply connect the USB storage device to SynScan Tour's USB
Host port. The files can be accessed from the Setting menu (in the main menu), from here select the “Files” icon. The USB folder will appear alongside the “NandFlash” folder. Touch a folder or file onscreen to select and open it.

8.6 Editing the User Defined Catalog

With SynScan Tour connected to a PC, you can create and edit your own “user-defined” celestial object list and transfer it to the SynScan Tour. You can then identify, locate, and perform telescope GOTO operations for the objects in your catalog, just like you would for other celestial objects already in SynScan Tour's database. To create and edit the User Defined catalog, follow these steps:

■ Connect SynScan Tour to a PC and open the “NandFlash” folder in SynScan Tour, as described in part 8.3.
■ In the file browse window, open menu “Tools\Folder Options”. Check the “View all files and folders” in the “View” tab.
■ Copy file “UserCatalog.exe” in folder “Planetarium” to a folder of your PC and double click it to run. Your PC screen will look like this:
Input an object's name and its coordinates into the text boxes at the upper-right side of the window, and then click the “Append” button to add it to the list.

To edit an object already in the list, double click it to fill its data in the text boxes, and then edit in the text boxes. Click the “Modify” button to update new data into the list.

To delete an item from the list, click on it to highlight it, and then click the “Delete Selected Item” button.

Click the 'Save' button to save the catalog. It is stored in the same folder as the UserCatalog.exe program, and the filename is UserCatalog.dat.

Copy the new UserCatalog.dat to the “\NandFlash\Planetarium” subfolder of SynScan Tour.

Click the “Import…” button to load the previously saved file “UserCatalog.dat” before adding new user object. Otherwise, the older user object data will be lost when user click the “Save” button.

8.7 Adding Images and Text Files

You can add your own astronomical images (or other images) to SynScan Tour's database, and they will be accessed and displayed just like the images already in SynScan Tour's memory. Follow these steps to add your images:

1. Save the image in JPEG format, and name it “NNNNxxxx_y.jpg” where:
   - NNNN is the name of the celestial object; Use “M”, “N” and “I” to replace NNNN for deep sky objects in the Messier, NGC, or IC catalogs. For objects which appear in both the Messier and NGC catalogs, use the Messier catalog designation.
   - xxxx is the catalog index number if the object is in the M,
NGC, or IC catalog.

- y is the image's index number; this is used for multiple images of the same object. The numbering should go from 1 to 7 (max) without missing a number.

Here are some examples of valid file names:
Jupiter_1.jpg   M31_1.jpg   N2264_1.jpg   N2264_2.jpg

- Prepare a text file to be displayed with the image.
  - The name of the text file should be the same as the image file, but use .cfg instead of .jpg.
  - The file can contain a maximum of two rows of 48 text characters.

- Connect SynScan Tour to a PC and copy the image files to the “\NandFlash\Planetarium\Media\jpg” folder, then copy the text files to the “0409” subfolder.

8.8 Calendar

From the main menu, select the Calendar icon (i.e. the icon showing the current lunar phase). A calendar will appear onscreen with the current date highlighted. The rise and set times for the Sun and Moon appear to the right, and the lunar phase of the Moon is shown in the main menu icon. The times of the end of dusk and the beginning of dawn also appear to the right, this information will help you best plan your astronomical viewing sessions.

Selecting a different date on the calendar will update the data for the chosen date.
TECHNICAL SUPPORT
Contact your local Sky-Watcher distributor