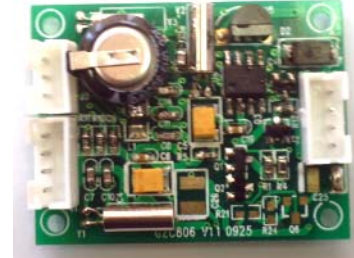


GC806 OSD Module

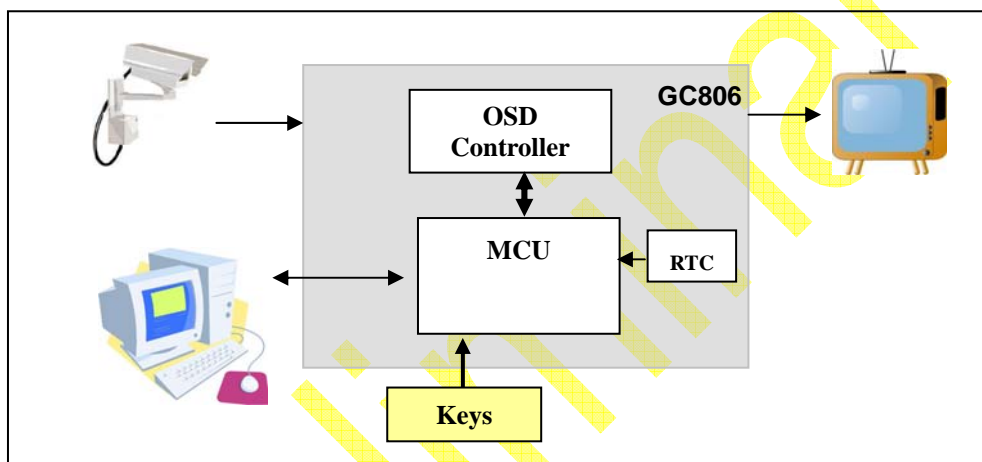
The **GC806 OSD Module** is a small device specially designed for low cost video camera application. It adds the date-time and string info to the video signal and display onto the TV monitor.

Features

- UART interface for data input
- Optional 2-key input for standalone application
- NTSC/PAL compatible
- RTC
- Date Time display
- Data String up to 9 lines
- 7.5-12V operation



Functional Block Diagram

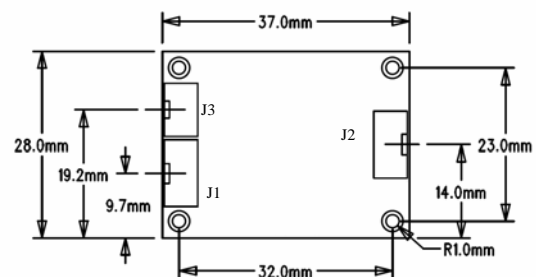
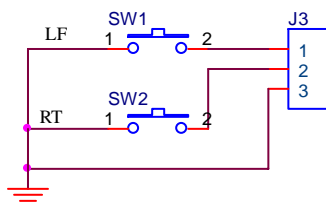


Specifications

TV standard	NTSC / PAL
Video Input	1V p-p, Composite Video
Video output	1V p-p, Composite Video
Interface	UART or 2-keys
Operation Voltage	7.5 -12V DC
Operation Current	TBD
Board Dimension	37x28 mm

Connectors

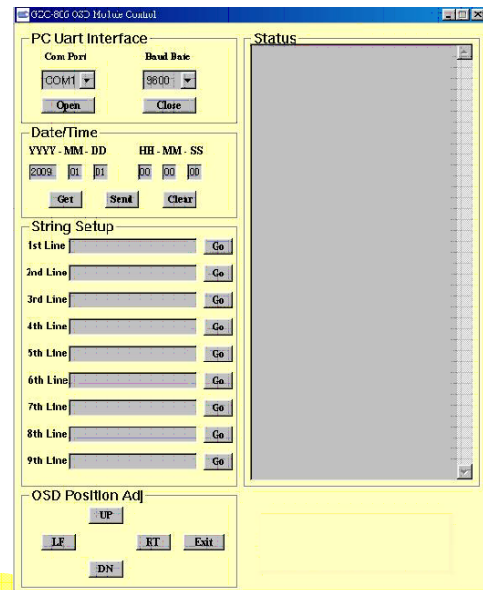
J1	UART	Serial communication port
J2	DC/TV	DC in, video in and video out
J3	Key	Key input



PC User Interface

A user friendly UI is designed for data input. Open the application GZC-806 OSD Module Control. The window is divided into 2 columns. Left hand side for data input and right hand side for COM port status display.

- 1 To Open the COM Port.
 - 1.1 Users need to open the COM port before operation.
 - 1.2 Select a port from COM 1 to 4, depending on the port availability.
 - 1.3 Set the Baud rate to 9600
 - 1.4 Then click Open.
 - 1.5 A message box will show up to tell if the port is opened successfully or not.
 - 1.6 To close the present COM port, click CLOSE.
- 2 To Set Date and Time
 - 2.1 User can input the date and time by typing digits into the boxes or; get the date time information from the PC system by clicking GET button.
 - 2.2 Click SEND to set the clock to the camera.



- 3 To Input Data String
 - 3.1 The system accepts 9 data string lines in total; each line can have maximum 24 characters including space.
 - 3.2 Only characters in upper case and digits are allowed.
 - 3.3 Input data in to the space provided with reference to the line number and click GO to display the data in the video image.



- 4 To Adjust the OSD Position
 - 4.1 Fine-tune the OSD position by clicking UP/DN/LF/RT.
 - 4.2 Note that the whole screen will be moved at the same time, i.e. you cannot relocate a particular item.
- 5 To Clear the Status Information
Click CLEAR button right under the date-time setting to remove the status information.
- 6 To Quit the Application.
Click EXIT button next to the OSD Position Adj buttons to quit this module control application.

Standalone Application

This module can work alone without UART connection. This is designed for the module which is used inside the video camera. It requires one time set up when installing the camera. In such case, some functions of the module are disabled for easier operation. It allows user to use 2-key (LF/RT) operation to set date time and string on the screen. Note that there will be only one string stamp on the screen that can be edited.






- 1 To Set Date and Time.
 - 1.1 Date time is shown on top of the screen, left alignment for date and right alignment for time. The position of these two items cannot be adjusted.

- 1.2 Press LF and hold for 3 sec to enter setup.
 - 1.3 The last two digits of year will flash. Set the date and time in the format of YYYY-MM-DD HH:MM:SS.
 - 1.4 Use LF to increase the figure, use RT to move next digit until the last.
 - 1.5 After setting all digits, press RT and it will save and quit.
- 2 To Set the OSD
 - 2.1 The OSD is shown on the bottom left corner
 - 2.2 Press RT and hold for 3 sec to enter OSD setup
 - 2.3 The screen will show a cursor flashing; press LF once to choose a character from A to Z (upper case only), 0 to 9 or blank space.
 - 2.4 Press RT to set the next character.
 - 2.5 Repeat the procedure to enter the whole string
 - 2.6 After setting all characters, press RT and it will save and quit.
 - 2.7 The length of string is 24-character, space included. Therefore, if no information is needed to input to the string, just fill with blank spaces for the rest of the string. I.e. Press RT until it quit the setup screen.

Note: The key operation allows fast forward function. I.e. if the LF key is pressed for 2 sec, there will be fast increment of numbers or characters.

Pin description of the connectors

<p>J1 - UART Serial communication port</p>  <p>GND Rx Tx 5V</p>	<p>J2 - DC/TV DC in, video in and video out</p>  <p>Vin GND Vid_out Vid_in</p>	<p>J3 – Key Input</p>  <p>GND K2 K1</p>
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