



*Automatic Timer Broadcast system
User Guide*

Model Name: QCM-6200

VER. G MP3

HMT TECH.CO.,LTD.

Catalogue

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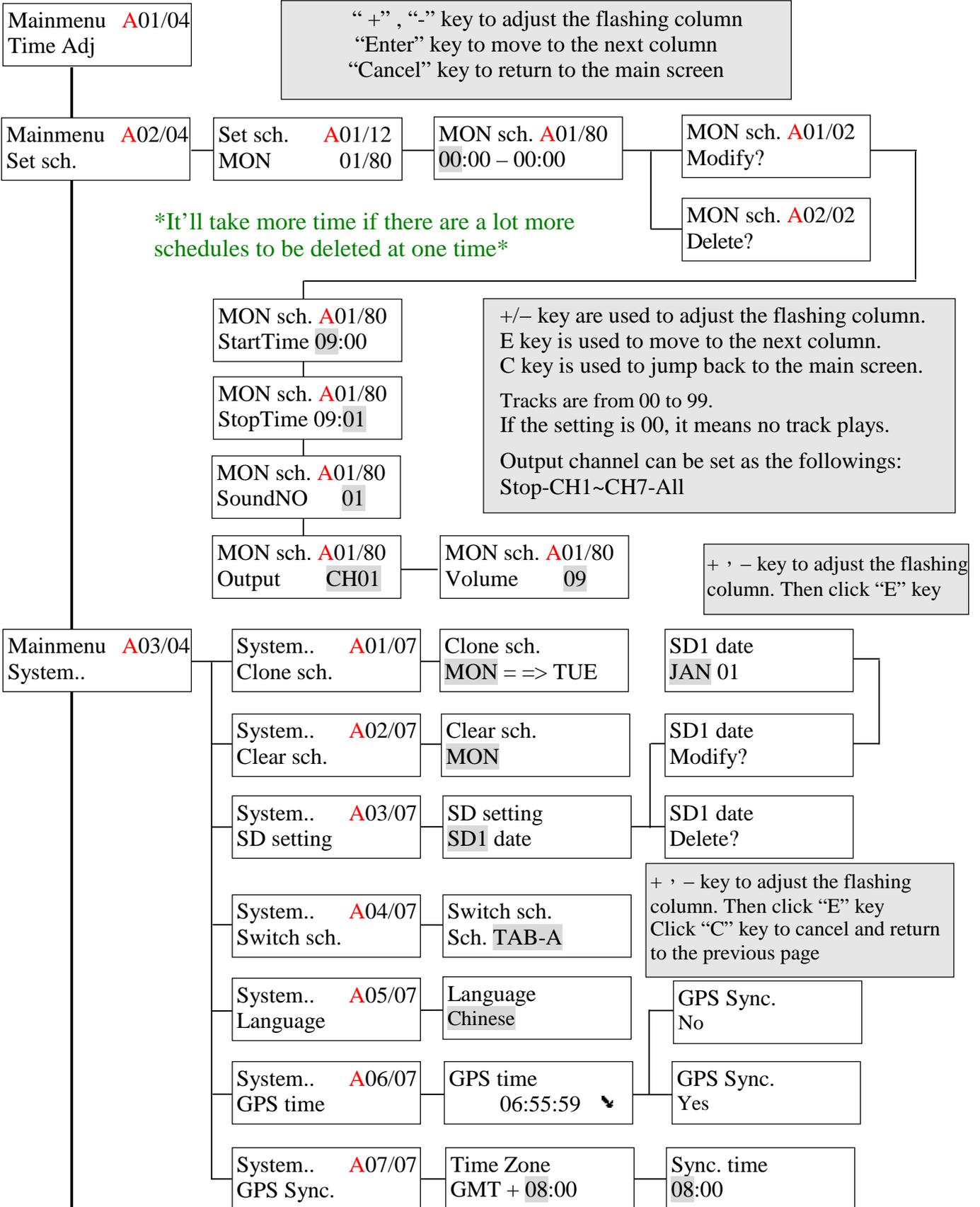
1.1 System Feature

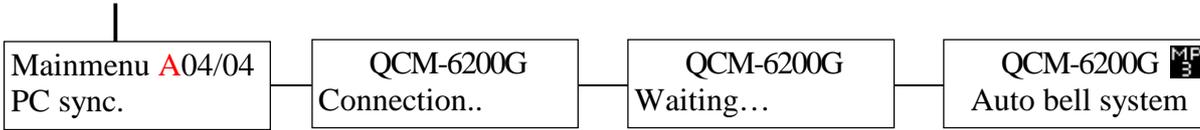
- (1) Built-in **SDHC(SD2.0)-high capacity SD card**. Bells : 99 bells
- (2) Built-in 6 melodies. (Please refer to the manual if you want to hear in advance)
- (3) **RS-232, a communication port to PC, for schedule arrangements and data transmission**
- (4) Volume adjustment in each schedule is controllable
- (5) Up to 80 schedules to be set freely on each weekday
- (6) Different schedules for all weekdays
- (7) Able to have the same schedule on each day
- (8) Provide extra 5 “Special Day”s (Each has 80 schedules at most) for schedule arrangement
- (9) Provide 7 relay output pins for programming
- (10) Provide one relay output pin to be triggered for starting an outer amplifier
- (11) Fully LCD display in Chinese/English
- (12) All schedules can be operated via the LCD front panel
- (13) Output pins and melody performances can be activated manually or automatically
- (14) The schedules and calendar will be hold if power failure
- (15) Display current date and time when in stand-by mode
- (16) **External GPS module (Optional equipment. Please contact the Sales Dept.)**
 *Equipment: GPS 1 on 1 or 1 on 2,3,4... as request.

1.2 Electronic Specification

- (1) Power : DC 12V / 1.5A. An ADAPTOR (free) AC100-240 – DC 12V
- (2) Display : 122x32 pixels, Chinese/English LCD back-lit panel
- (3) Function Key : 4-Key function key
- (4) Power Off Data Storage : 10 years
- (5) Minimum Unit of The Time Setting : 1 minute
- (6) Output Pin : 8 units (7 units can be used as program controller. 1 unit can be an output for default value)
- (7) Standby Status Display : Year (4-digit) - Month - Day-Weekday. Clock time: Hour : Minute : Second
- (8) A.F. Output : 3V p-p / 600 ohm(Ro)
- (9) THD Rate : Po=20W, f=1kHz, 0.02 %
 Po=20W, f=40Hz to 15KHz, 0.05 %
- (10) S/N Rate : 100 – 108 db
- (11) Internal Speaker : 1W, 30 db
- (12) Frequency Response : 100-20kHz
- (13) Dimension : Standard 1U Industrial Metal box

1.3 Front Panel Photo & System Function





<Note>

- 1.) When the system starts the transmission program, it'll detect SCHEDIT program to see if it's connecting and downloading. If the system remains disconnected for more than one minute, it'll return to the previous page. System reset can shut off the system and then turn it on.
- 2.) Transmit, edit and download the schedule data via SCHEDIT.EXE tool software on PC.

☆New Functions :

1.) Schedule Shift:

Mainmenu A03/04
System..

System.. A04/07
Switch sch.

Download "Schedule A" & "Schedule B" from the SCHEDIT program.
Operate via the KEYPAD on the LCD, entering the System Setting menu→Schedule Shift.
Select the preferred schedule to program here.

『A』 means the settings are valid in the Schedule A only.

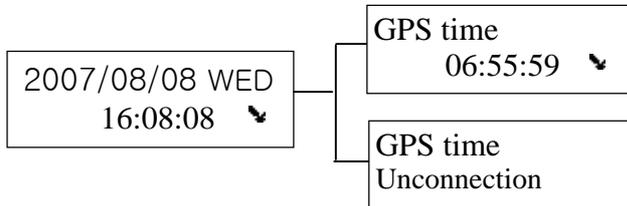
2.) Language:

System.. A05/07
Language

Language
Chinese

QCM-6200G LCD language interface:
Chinese/English

3.) GPS Time:



Current GPS time:
QCM-6200G synchronizes time with GPS.

P.S: If not equipped with GPS, this function remains inactive!

*When GPS connects successfully, there'll be a **satellite icon** underneath the right side of the LCD screen on the QCM-6200G!

4.) GPS Synchronization:

System.. A07/07
GPS Sync.

Time Zone
GMT + 08:00

Sync. time
08:00

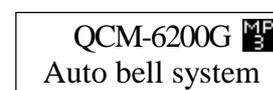
Select Time Zone first Then set the time in the time zone

For GPS Synchronization settings, the description is as follows:

When GPS time is at 08:00 in GMT +8:00 time zone, QCM-6200G will synchronize time with GPS!!

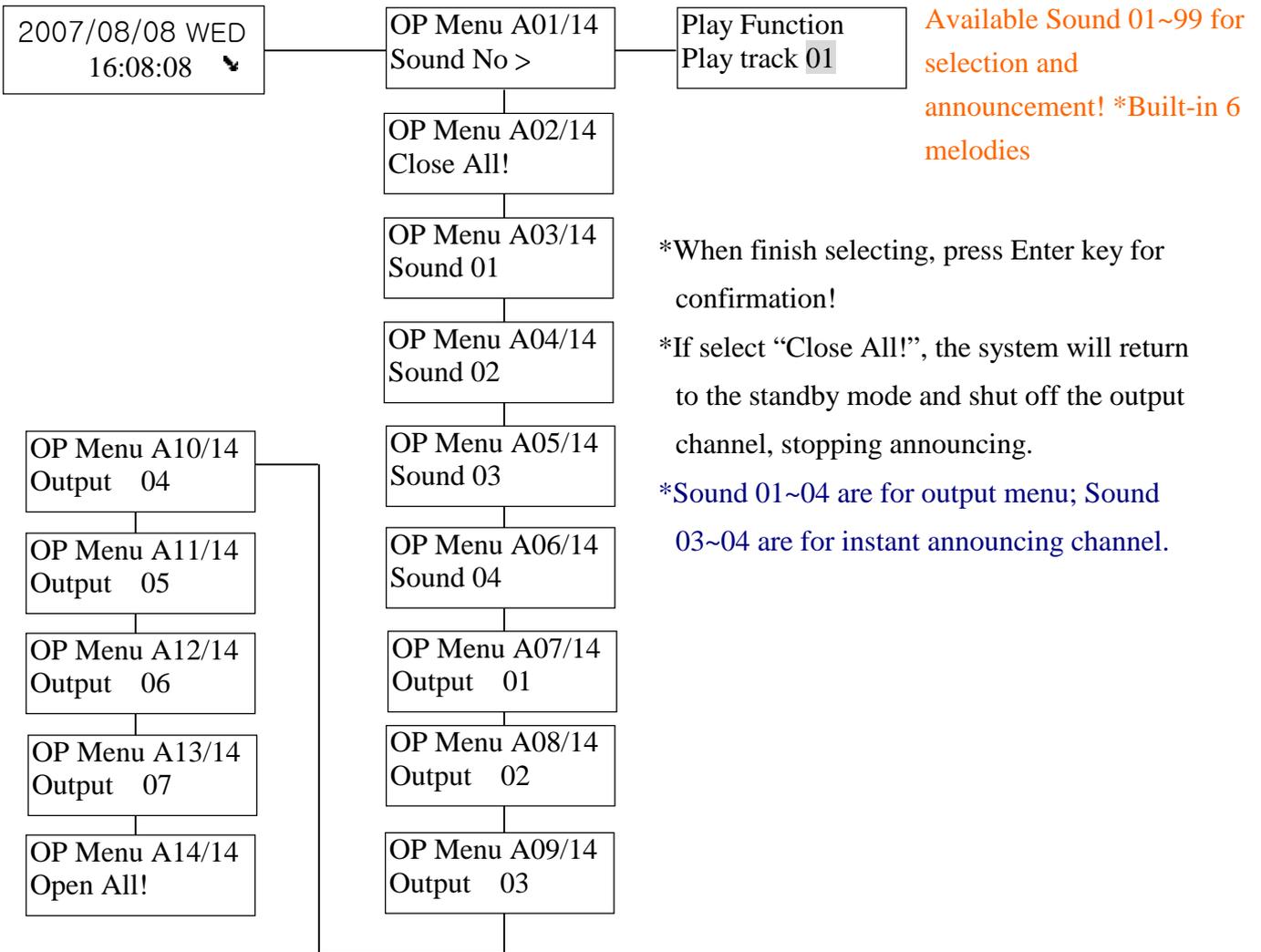
5.) **Starting Screen:** For QCM-6200G MP3 version, when start the QCM-6200G machine, there'll be a MP3 icon shown on the right side of LCD display!

*The icon is to differ MP3 version from VCM-Series one.



1.4 Manual Operation List

In Standby mode, press the MANUAL key to enter **Output Menu** settings. Turn on the O/P and play the announcement manually!



1.5 Schedule Volume Output Adjustment

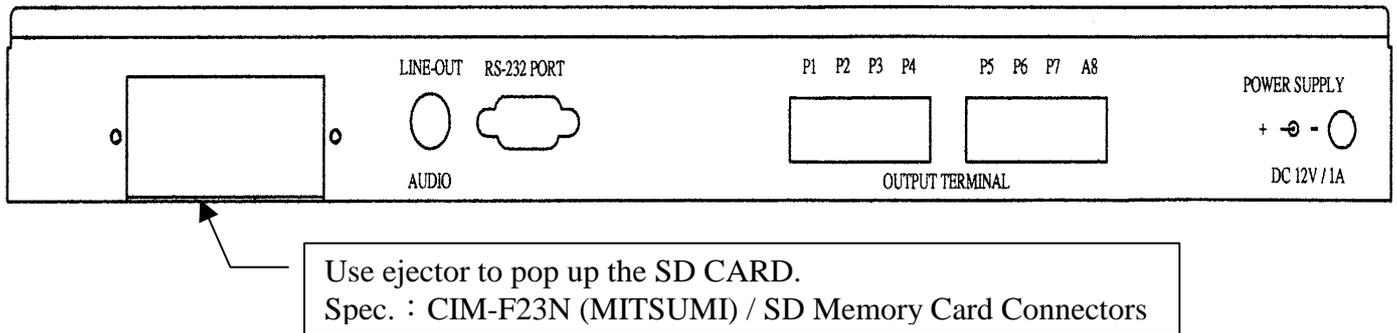


* Up to 14 degrees
 * Default value is 9th degree (0 db)

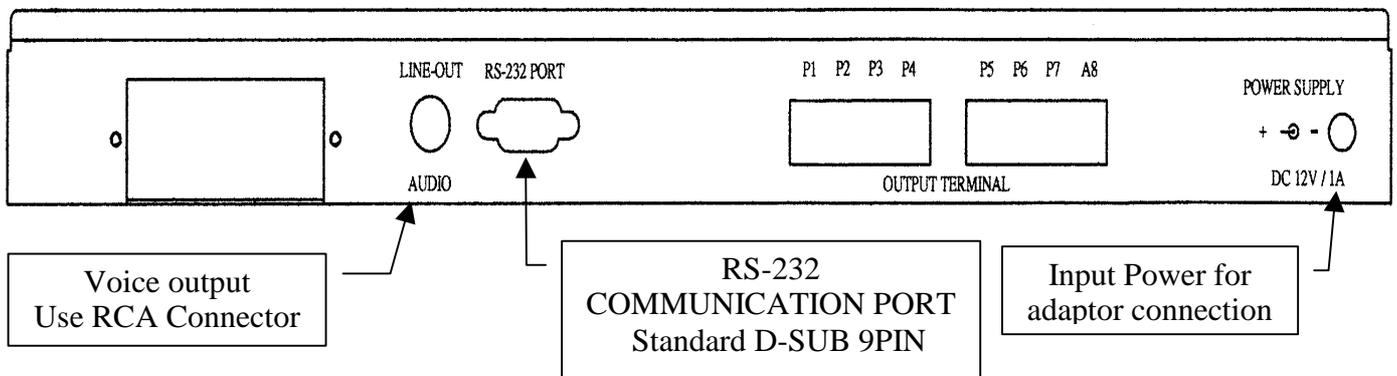
- 0 = -78 db
- 1 = -8 db
- 2 = -7 db
- 3 = -6 db
- 4 = -5 db
- 5 = -4 db
- 6 = -3 db
- 7 = -2 db
- 8 = -1 db
- 9 = 0 db
- 10 = +1 db
- 11 = +2 db
- 12 = +3 db
- 13 = +4 db
- 14 = +5 db

1.6 Back Panel Connector Illustration

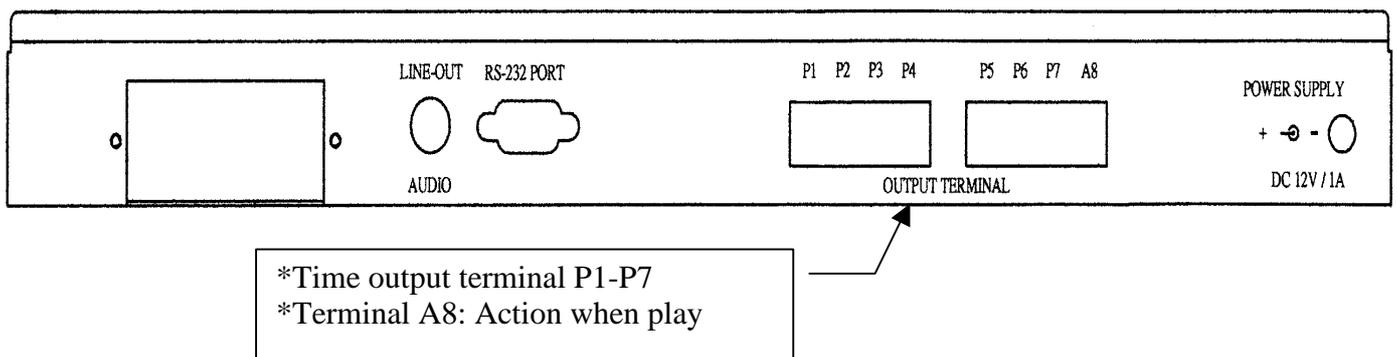
(1) Leave an open square locked by a panel on the left. It can quickly unlock the panel by dismantling the screws when change the SD CARD.



(2) Back Panel LINE-OUT / RS-232 PORT / POWER SUPPLY Illustration



(3) Back Panel RS-232 PORT/CIRCUIT CONTROL OUTPUT CONNECTOR/ POWER SUPPLY illustration

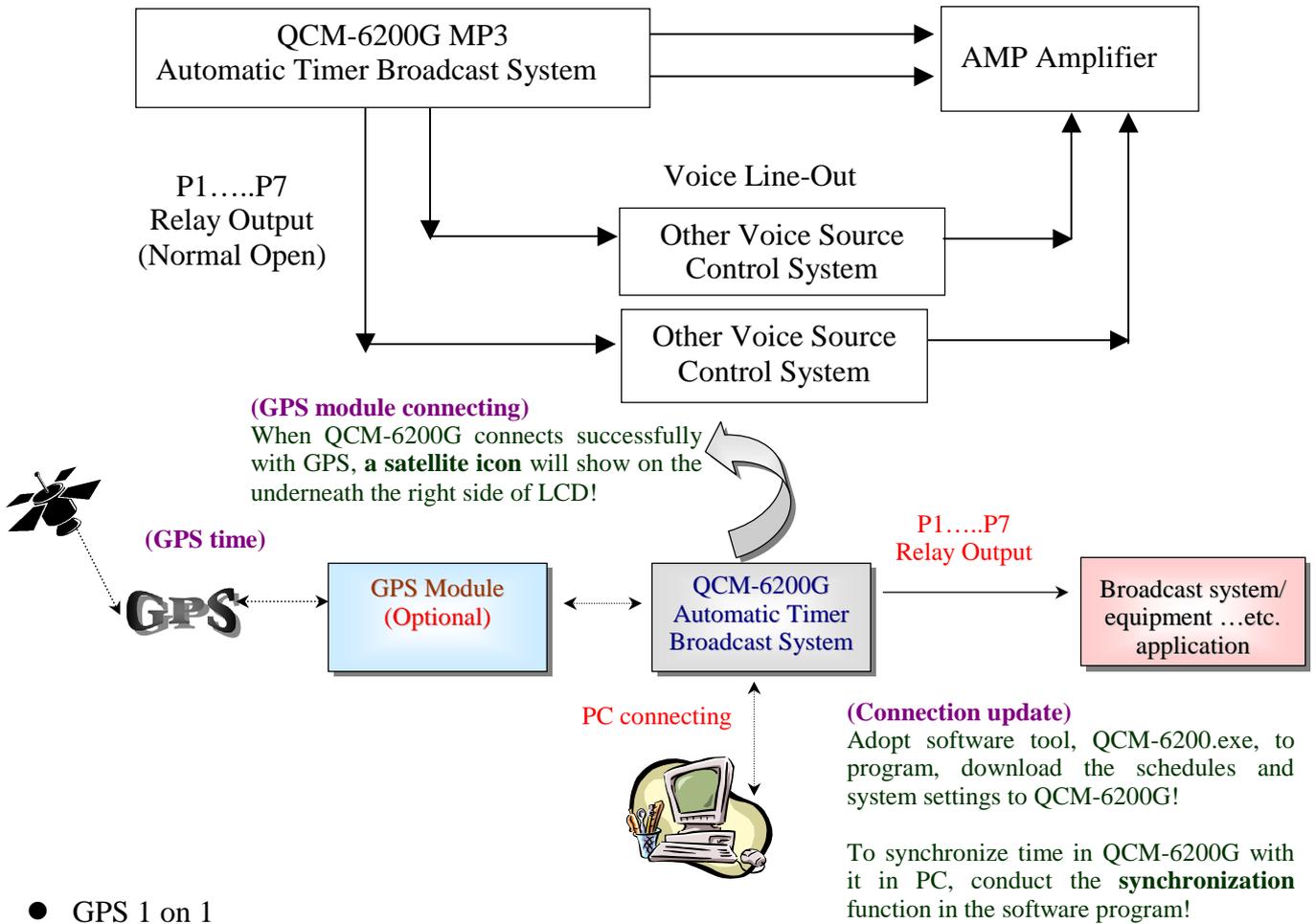


1.7 Accessory

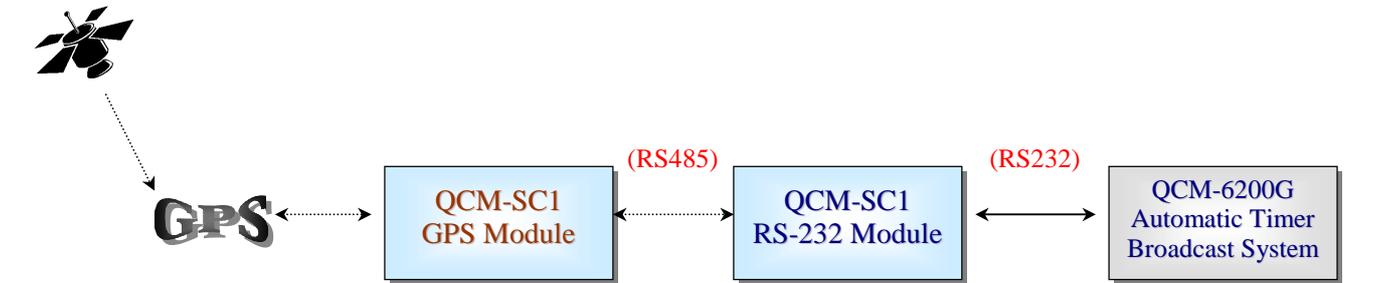
- (1) ADAPTOR × 1 (Spec. : 100~240-VAC TO DC 12V 1.5 A)
- (2) L shape iron for fixing the standard 19" (rack for mounting) × 2 pcs
- (3) CD-ROM × 1

1.8 System Functional Diagram

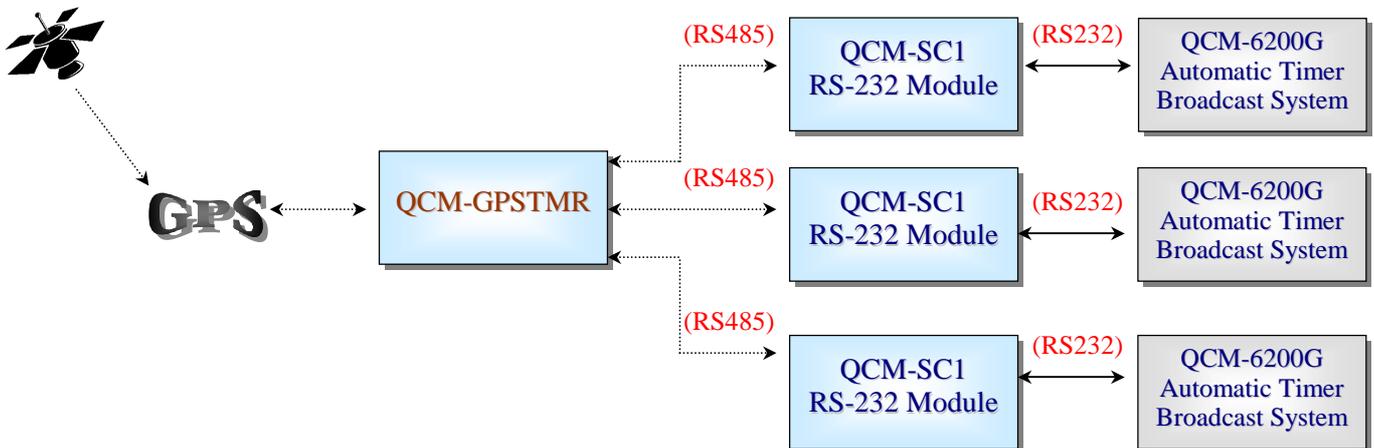
Output Terminal A8 (default value when play)



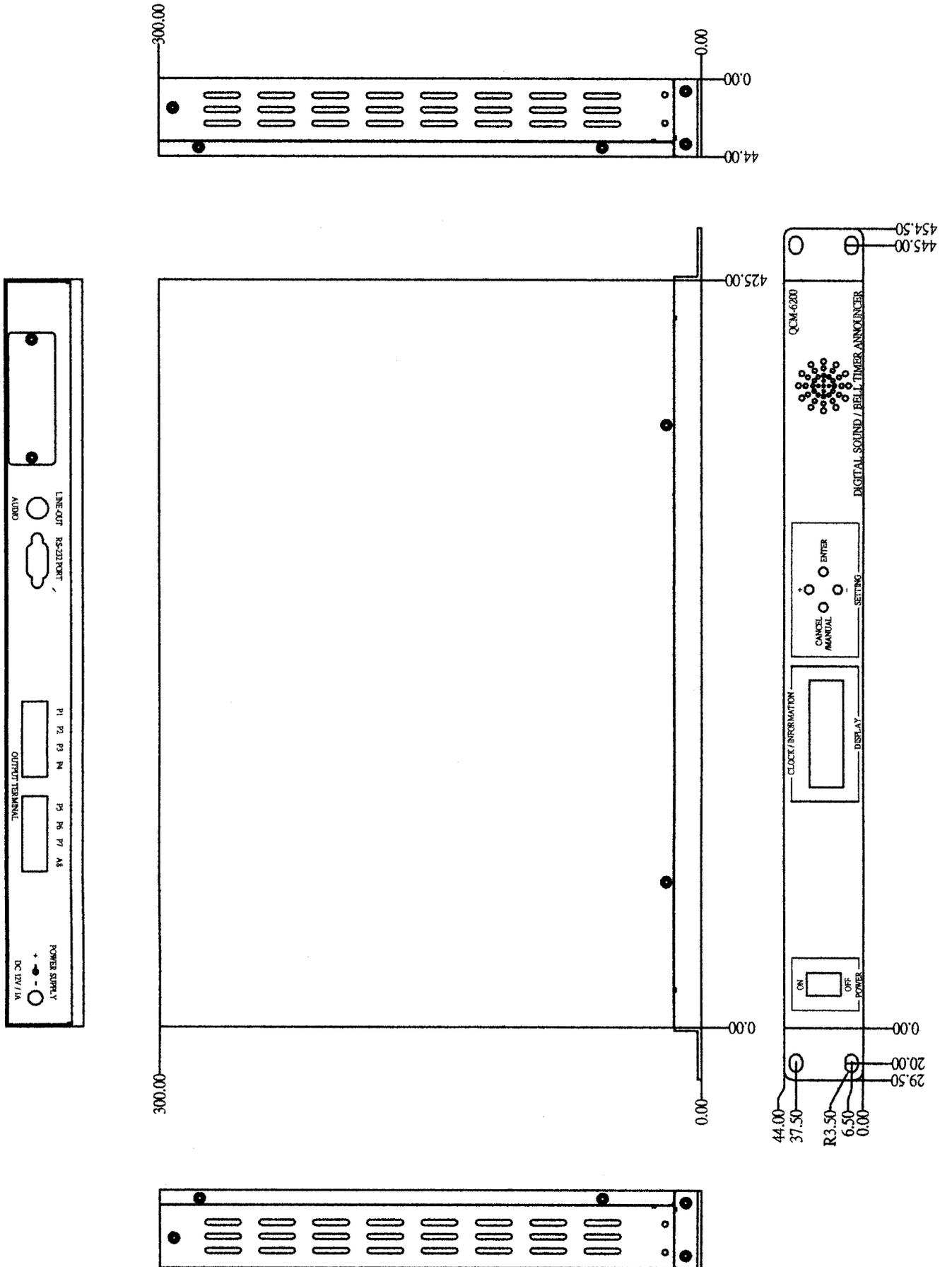
- GPS 1 on 1



- GPS 1 on 2,3,4...



1.9 Metal Box Dimension



2.1 VCM-SD300 MP3 Digital Voice Module

VCM-SD300 adopts Disk Volume ID and short file name for voice filing. No need for further file settings! User-friendly and quick interface for operation! For MP3 format, SAMPLE RATE can be up to 48KHZ; compressed BIT RATE can be to 320KBit/s. For file saving, VCM-SD300 can support up to a 16GB SD CARD!

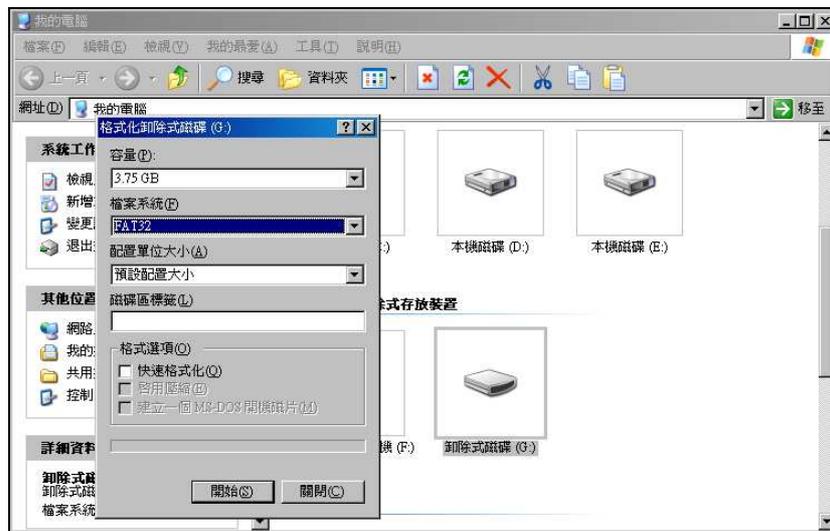
The trigger mode for QCM-6200G is **BCD mode: Parallel Binary Mode(8bit)**.

Input triggers are X0-X7. Max. voice output can reach to 99 files in mp3 format at most.

2.2 SD CARD Disk Volume ID (DVID) Settings

- Via a SD CARD reader, read files from SD CARD. Please format the SD CARD before storing files:

*File format: FAT32

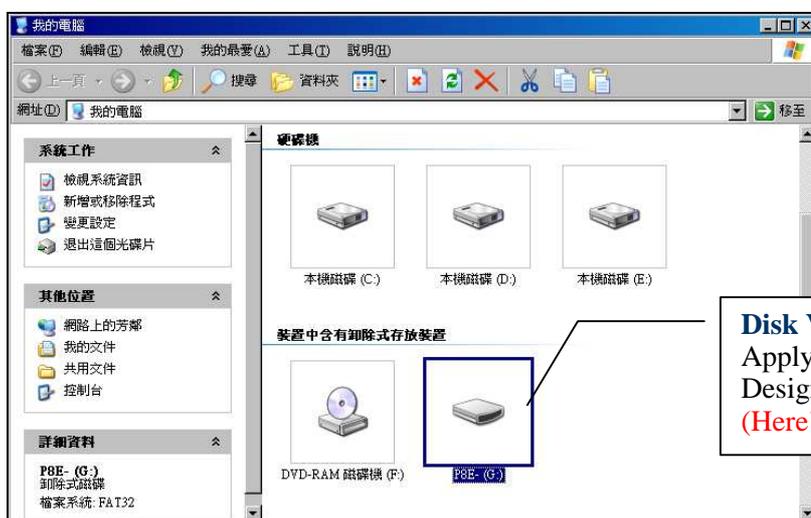


- Equipped with QCM-6200G. Disk Volume ID settings please refer to the form below:

Operation Mode	Disk Volume ID	
BCD Mode	Edge	P8E-
	Level	P8L-

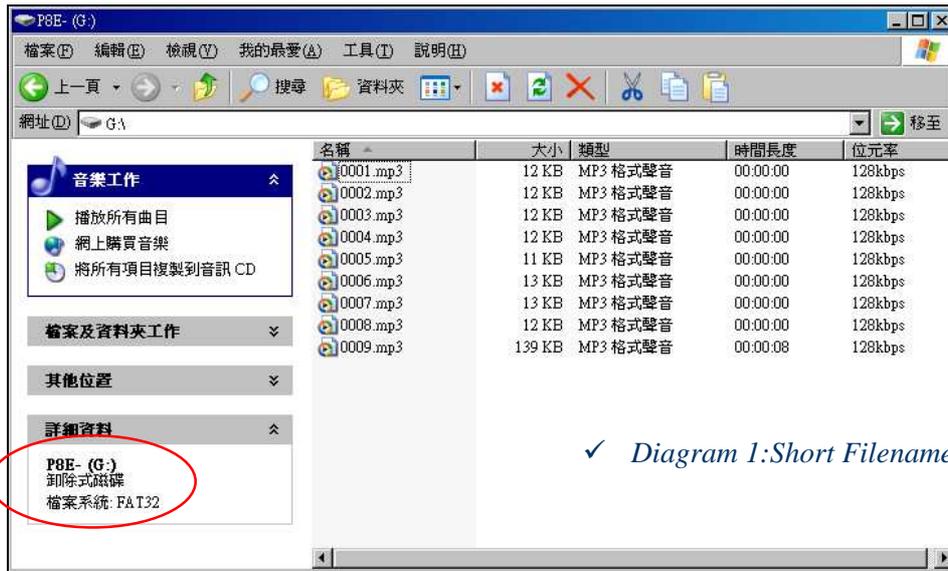
*Two ways to be triggered via the external signal: Edge: When triggered, only play once.

Level: When triggered, keep playing.



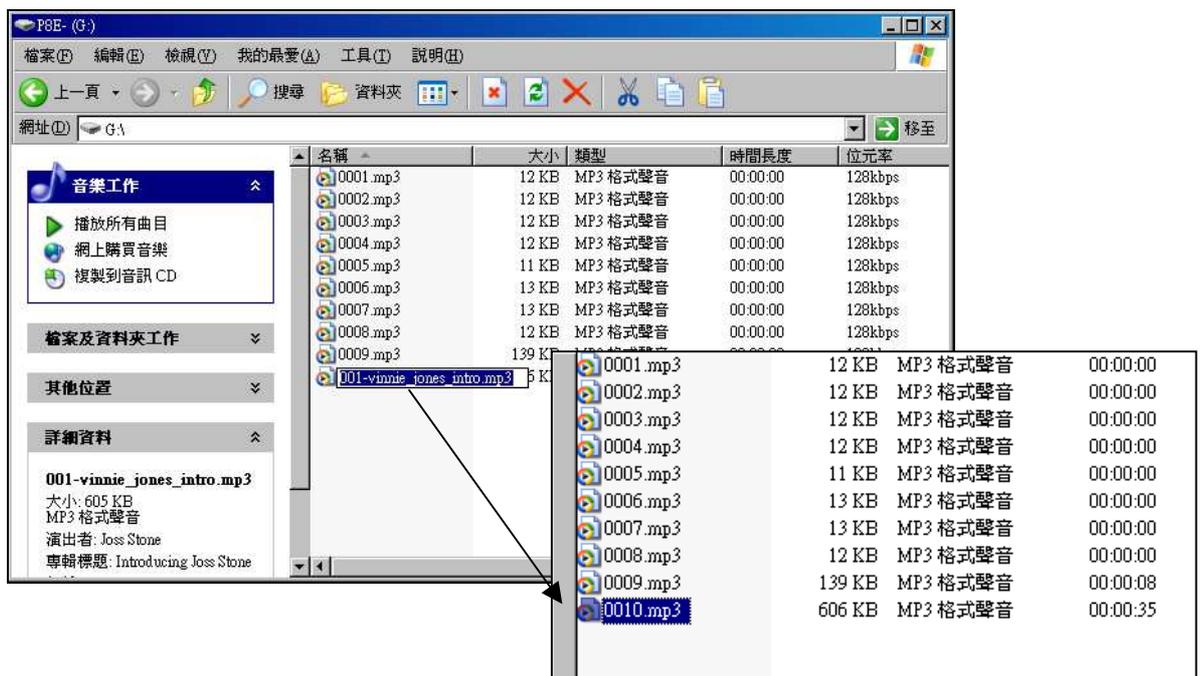
2.3 Short Filename Definition & Setting

- Short Filename Format : The filename is composed of four English letters/numbers. Not allowed to leave space in a file name(or it'll be regarded as a long filename) (See Diagram 1).
- For the extension name, not allowed to leave space between the letters/numbers nor show the capital and small letters together in a filename! **Suggest use capital letters/numbers in both filenames and extension ones!** *The extension name, .MP3, is the only valid format for the system.
- Please note that the file format for VCM-SD300 module is FAT32!! Check the SD CARD is for FAT32 in advance, or VCM-SD300 can't function.



✓ Diagram 1: Short Filename Format

- Able to add new voice files to the list or replace the built-in ones (0001.MP3~0006.MP3) with preferred voice ones. *Copy the MP3 file sources and store them onto a SD CARD. To use these files in this software, please name them in a short filename form!!
- * The voice files in QCM-6200G are named 0001 – 0099. The numbers are correspond to the bell nos shown from LCD (BELL “1 - 99”).*



2.4 BCD Mode Code Table (Max: 99 files)

* Values in X7~X0: "1" means triggered while "0" means not, which isn't related to the voltage level.

BCD Mode (Max: 99 files)

X7	X6	X5	X4	X3	X2	X1	X0	Default File	X7	X6	X5	X4	X3	X2	X1	X0	Default File
0	0	0	0	0	0	0	0	Stop playing	0	0	1	0	0	0	0	0	0032.MP3
0	0	0	0	0	0	0	1	0001.MP3	0	0	1	0	0	0	0	1	0033.MP3
0	0	0	0	0	0	1	0	0002.MP3	0	0	1	0	0	0	1	0	0034.MP3
0	0	0	0	0	0	1	1	0003.MP3	0	0	1	0	0	0	1	1	0035.MP3
0	0	0	0	0	1	0	0	0004.MP3	0	0	1	0	0	1	0	0	0036.MP3
0	0	0	0	0	1	0	1	0005.MP3	0	0	1	0	0	1	0	1	0037.MP3
0	0	0	0	0	1	1	0	0006.MP3	0	0	1	0	0	1	1	0	0038.MP3
0	0	0	0	0	1	1	1	0007.MP3	0	0	1	0	0	1	1	1	0039.MP3
0	0	0	0	1	0	0	0	0008.MP3	0	0	1	0	1	0	0	0	0040.MP3
0	0	0	0	1	0	0	1	0009.MP3	0	0	1	0	1	0	0	1	0041.MP3
0	0	0	0	1	0	1	0	0010.MP3	0	0	1	0	1	0	1	0	0042.MP3
0	0	0	0	1	0	1	1	0011.MP3	0	0	1	0	1	0	1	1	0043.MP3
0	0	0	0	1	1	0	0	0012.MP3	0	0	1	0	1	1	0	0	0044.MP3
0	0	0	0	1	1	0	1	0013.MP3	0	0	1	0	1	1	0	1	0045.MP3
0	0	0	0	1	1	1	0	0014.MP3	0	0	1	0	1	1	1	0	0046.MP3
0	0	0	0	1	1	1	1	0015.MP3	0	0	1	0	1	1	1	1	0047.MP3
0	0	0	1	0	0	0	0	0016.MP3	0	0	1	1	0	0	0	0	0048.MP3
0	0	0	1	0	0	0	1	0017.MP3	0	0	1	1	0	0	0	1	0049.MP3
0	0	0	1	0	0	1	0	0018.MP3	0	0	1	1	0	0	1	0	0050.MP3
0	0	0	1	0	0	1	1	0019.MP3	0	0	1	1	0	0	1	1	0051.MP3
0	0	0	1	0	1	0	0	0020.MP3	0	0	1	1	0	1	0	0	0052.MP3
0	0	0	1	0	1	0	1	0021.MP3	0	0	1	1	0	1	0	1	0053.MP3
0	0	0	1	0	1	1	0	0022.MP3	0	0	1	1	0	1	1	0	0054.MP3
0	0	0	1	0	1	1	1	0023.MP3	0	0	1	1	0	1	1	1	0055.MP3
0	0	0	1	1	0	0	0	0024.MP3	0	0	1	1	1	0	0	0	0056.MP3
0	0	0	1	1	0	0	1	0025.MP3	0	0	1	1	1	0	0	1	0057.MP3
0	0	0	1	1	0	1	0	0026.MP3	0	0	1	1	1	0	1	0	0058.MP3
0	0	0	1	1	0	1	1	0027.MP3	0	0	1	1	1	0	1	1	0059.MP3
0	0	0	1	1	1	0	0	0028.MP3	0	0	1	1	1	1	0	0	0060.MP3
0	0	0	1	1	1	0	1	0029.MP3	0	0	1	1	1	1	0	1	0061.MP3
0	0	0	1	1	1	1	0	0030.MP3	0	0	1	1	1	1	1	0	0062.MP3
0	0	0	1	1	1	1	1	0031.MP3	0	0	1	1	1	1	1	1	0063.MP3

BCD Mode (Max: 99 files)

X7	X6	X5	X4	X3	X2	X1	X0	Default File	X7	X6	X5	X4	X3	X2	X1	X0	Default File
0	0	0	0	0	0	0	0	Stop playing	0	0	1	0	0	0	0	0	0032.MP3
0	0	0	0	0	0	0	1	0001.MP3	0	0	1	0	0	0	0	1	0033.MP3
0	0	0	0	0	0	1	0	0002.MP3	0	0	1	0	0	0	1	0	0034.MP3
0	0	0	0	0	0	1	1	0003.MP3	0	0	1	0	0	0	1	1	0035.MP3
0	0	0	0	0	1	0	0	0004.MP3	0	0	1	0	0	1	0	0	0036.MP3
0	0	0	0	0	1	0	1	0005.MP3	0	0	1	0	0	1	0	1	0037.MP3
0	0	0	0	0	1	1	0	0006.MP3	0	0	1	0	0	1	1	0	0038.MP3
0	0	0	0	0	1	1	1	0007.MP3	0	0	1	0	0	1	1	1	0039.MP3
0	0	0	0	1	0	0	0	0008.MP3	0	0	1	0	1	0	0	0	0040.MP3
0	0	0	0	1	0	0	1	0009.MP3	0	0	1	0	1	0	0	1	0041.MP3
0	0	0	0	1	0	1	0	0010.MP3	0	0	1	0	1	0	1	0	0042.MP3
0	0	0	0	1	0	1	1	0011.MP3	0	0	1	0	1	0	1	1	0043.MP3
0	0	0	0	1	1	0	0	0012.MP3	0	0	1	0	1	1	0	0	0044.MP3
0	0	0	0	1	1	0	1	0013.MP3	0	0	1	0	1	1	0	1	0045.MP3
0	0	0	0	1	1	1	0	0014.MP3	0	0	1	0	1	1	1	0	0046.MP3
0	0	0	0	1	1	1	1	0015.MP3	0	0	1	0	1	1	1	1	0047.MP3
0	0	0	1	0	0	0	0	0016.MP3	0	0	1	1	0	0	0	0	0048.MP3
0	0	0	1	0	0	0	1	0017.MP3	0	0	1	1	0	0	0	1	0049.MP3
0	0	0	1	0	0	1	0	0018.MP3	0	0	1	1	0	0	1	0	0050.MP3
0	0	0	1	0	0	1	1	0019.MP3	0	0	1	1	0	0	1	1	0051.MP3
0	0	0	1	0	1	0	0	0020.MP3	0	0	1	1	0	1	0	0	0052.MP3
0	0	0	1	0	1	0	1	0021.MP3	0	0	1	1	0	1	0	1	0053.MP3
0	0	0	1	0	1	1	0	0022.MP3	0	0	1	1	0	1	1	0	0054.MP3
0	0	0	1	0	1	1	1	0023.MP3	0	0	1	1	0	1	1	1	0055.MP3
0	0	0	1	1	0	0	0	0024.MP3	0	0	1	1	1	0	0	0	0056.MP3
0	0	0	1	1	0	0	1	0025.MP3	0	0	1	1	1	0	0	1	0057.MP3
0	0	0	1	1	0	1	0	0026.MP3	0	0	1	1	1	0	1	0	0058.MP3
0	0	0	1	1	0	1	1	0027.MP3	0	0	1	1	1	0	1	1	0059.MP3
0	0	0	1	1	1	0	0	0028.MP3	0	0	1	1	1	1	0	0	0060.MP3
0	0	0	1	1	1	0	1	0029.MP3	0	0	1	1	1	1	0	1	0061.MP3
0	0	0	1	1	1	1	0	0030.MP3	0	0	1	1	1	1	1	0	0062.MP3
0	0	0	1	1	1	1	1	0031.MP3	0	0	1	1	1	1	1	1	0063.MP3

2.5 Alarm Sound Descriptions

Message	Long beep	Short beep	Description
Start-up Sound	-	2	
No Memory Card	1	1	No SD card / insertion flaw
SD CARD Format Error	2	2	Incorrect file format in SD card (not FAT32 format)
No Voice files for playing	2	1	Files in the SD card are not MP3 ones. No files exist!
System Malfunction	1	2	Suggest send the module back for check
Start System Renew	-	1	
Finish System Renew	1	-	

2.6 MP3 Voice Length Measurement

- **SD CARD capacity (bit) / bit rate = Valid voice length(Sec.)**

EX: **2(GB)***1024*1024*1024= 2*2³⁰ Bytes = 2147483648 Bytes

2147483648 byte*8= 17179869184 bit

bit rate: **320kbps *1000 =320000**

17179869184 bit / 320000 = 53687.0912 sec (894.8 min=14.9 hr)

- **Voice length (Sec.) * bit rate = MP3 file size**

EX: Voice length:5 min 10 sec = 5*60+10=310 sec

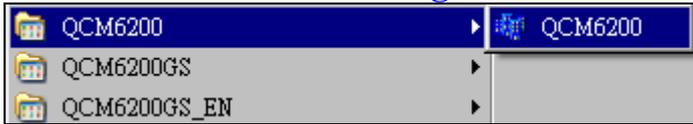
bit rate:128kbps =128000

310*128000 = 39680000 bit (39680000 bit/8 = 4960000Byte approx. 4.96MB)

****Words in red mean** different capacity of SD card and bit rate may affect the length of voice files.**

*****For a more stable quality on voice announcement, please make the MP3 voices with the same sampling rate and compressed bit rate level! (For better sound performance, please make the voice sampling rate 44.1KHz and bit rate 320kbps.)**

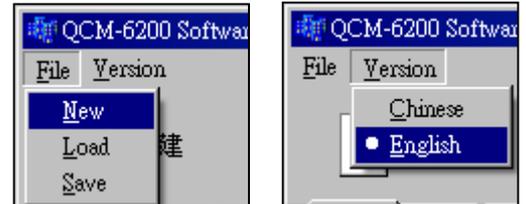
SCEDIT Schedule Setting Software



QCM-6200G can support SCHEDIT software. It can synchronize time and download by connecting to PC, making the system more flexible and efficient. #Example file, SAMPLE.QSH, can be found in the catalog of SCHEDIT for testing.

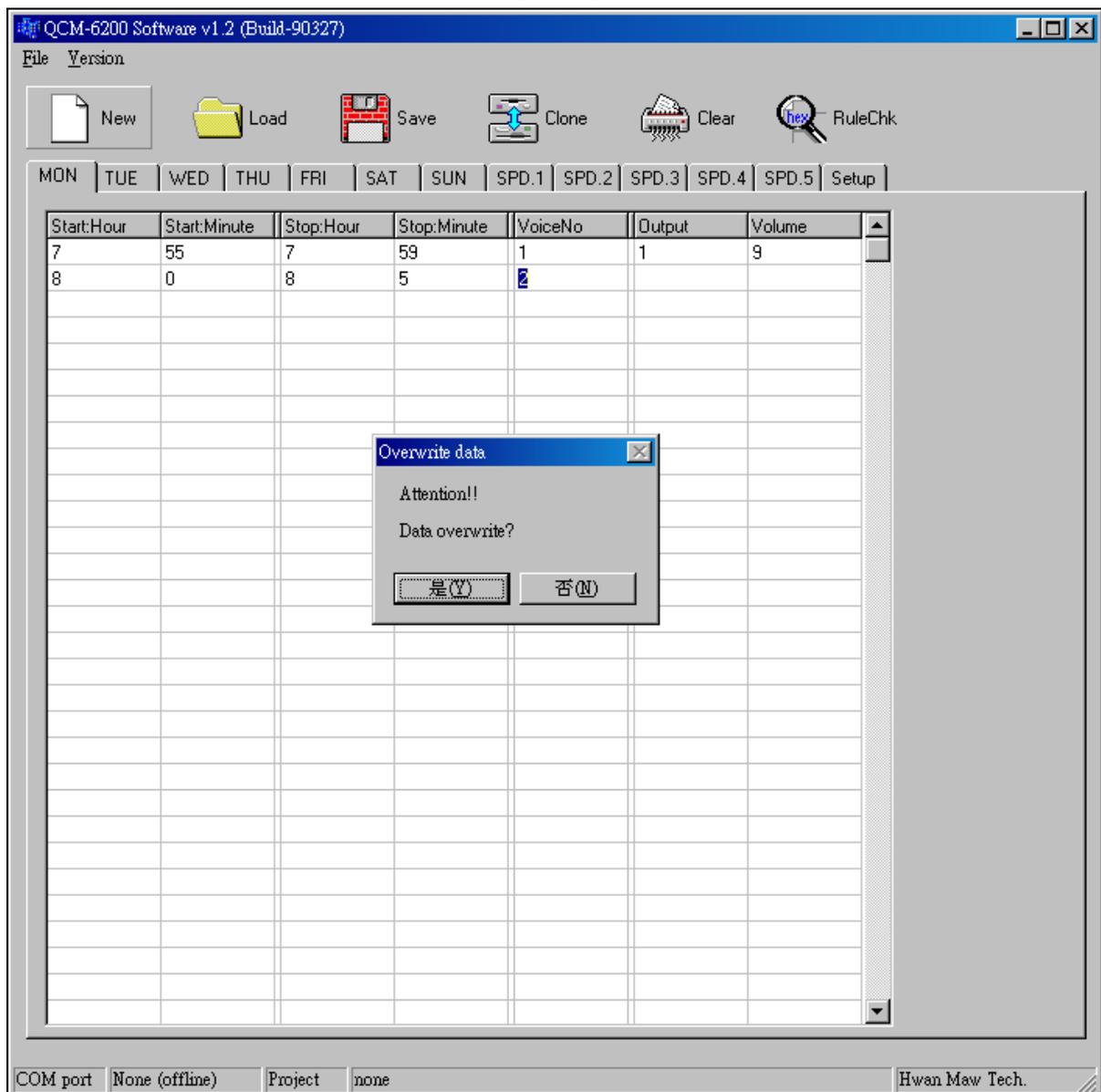
3.1 Operation Menu:

1. File : New/Load/Save
2. Version : Chinese/English



3.2 New: Click on “New” icon from the pull-down menu to set up a new schedule. Every new file will cover the existing one. There’ll be a warning before overlapping! When reopen a schedule, it will cover the existing one or the one that is being programmed. Double click on the left key to key in contents in the schedule. 80 schedules are available on a day. To delete all the data in a row, please right click on the selected row to delete. 24-hour time format is the valid form for schedule starting and ending time setting.

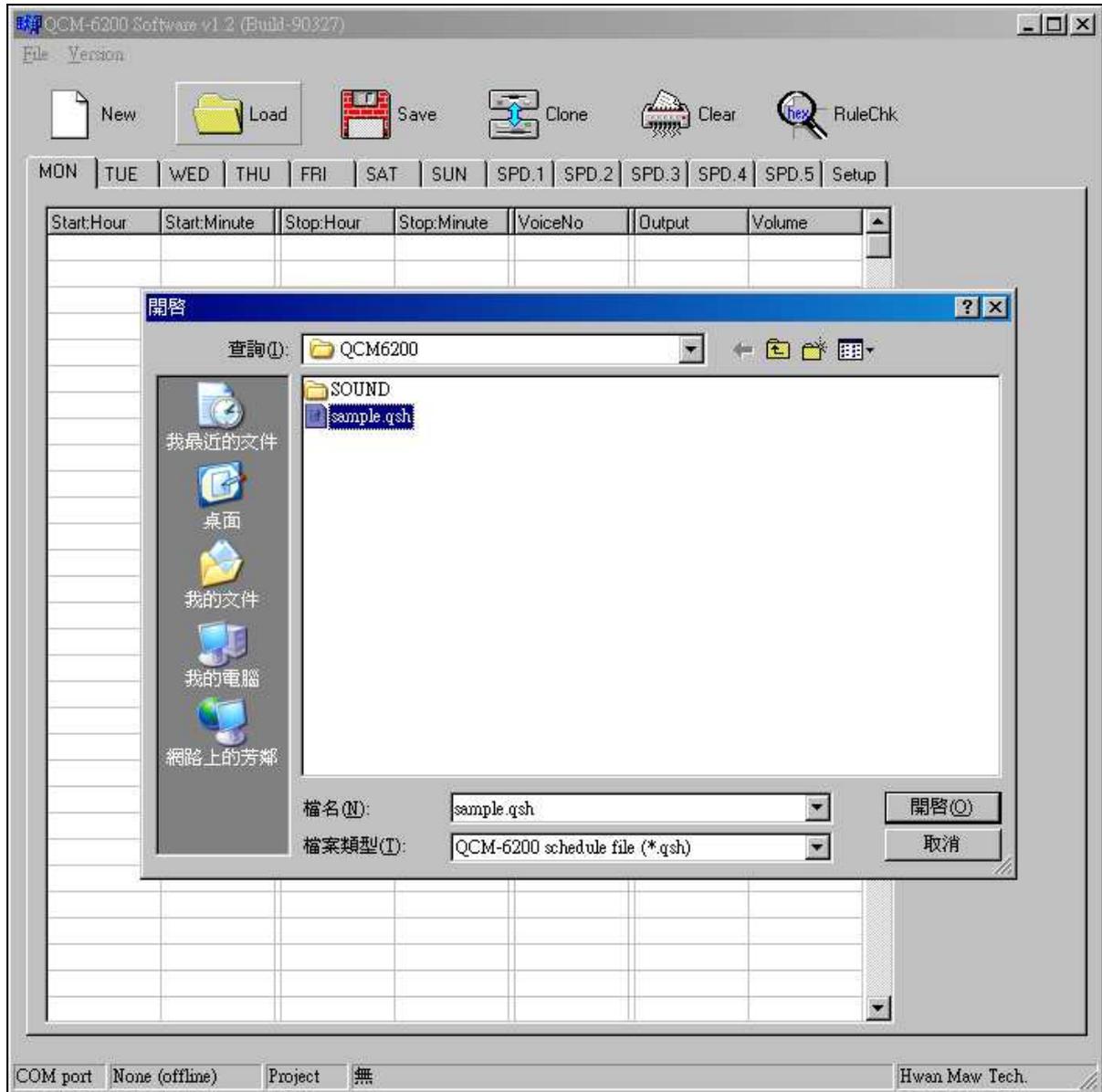
* **Built-in 6 melodies.** To add more melodies, please save other MP3 voice files onto a SD CARD and name these files in a short filename form!! The max. quantity for melodies is 99 ones.



3.3 Load

Click on “Load” icon to open the saved file (QSH file is a setting file). There’ll be a warning before overlapping! The loaded file, QSH file, will cover the existing file or the one that is being programming.

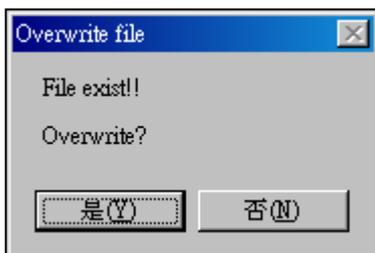
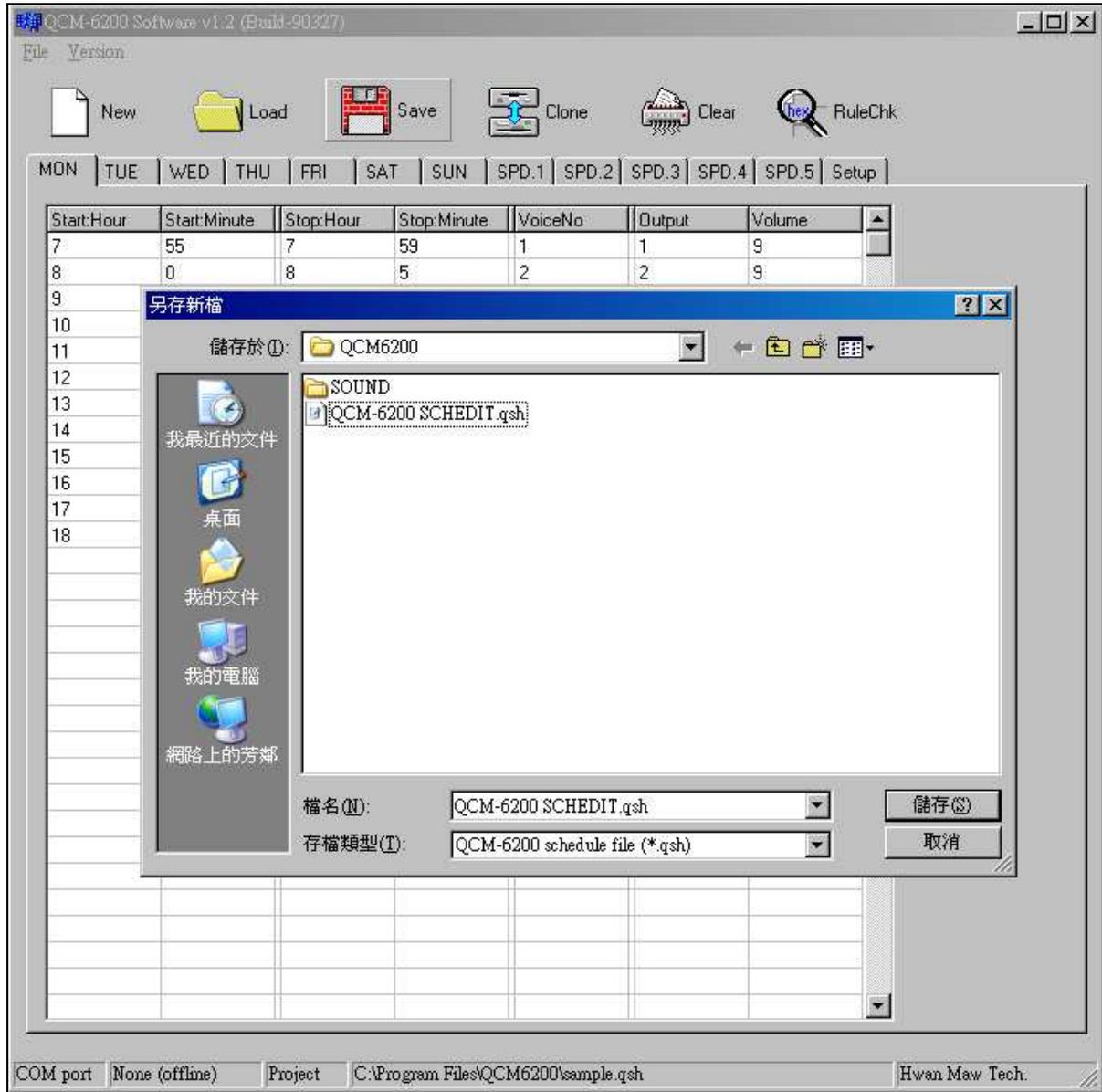
#Example file: Open the SAMPLE.QSH. file from the folder in SCHEDIT



*The extension name for QCM-6200G settings : .qsh

3.4 Save

When the schedule programming and related settings are done, click on “Save” icon to save the file. Able to save this file as a new one, or save it by covering the previous/existing file!

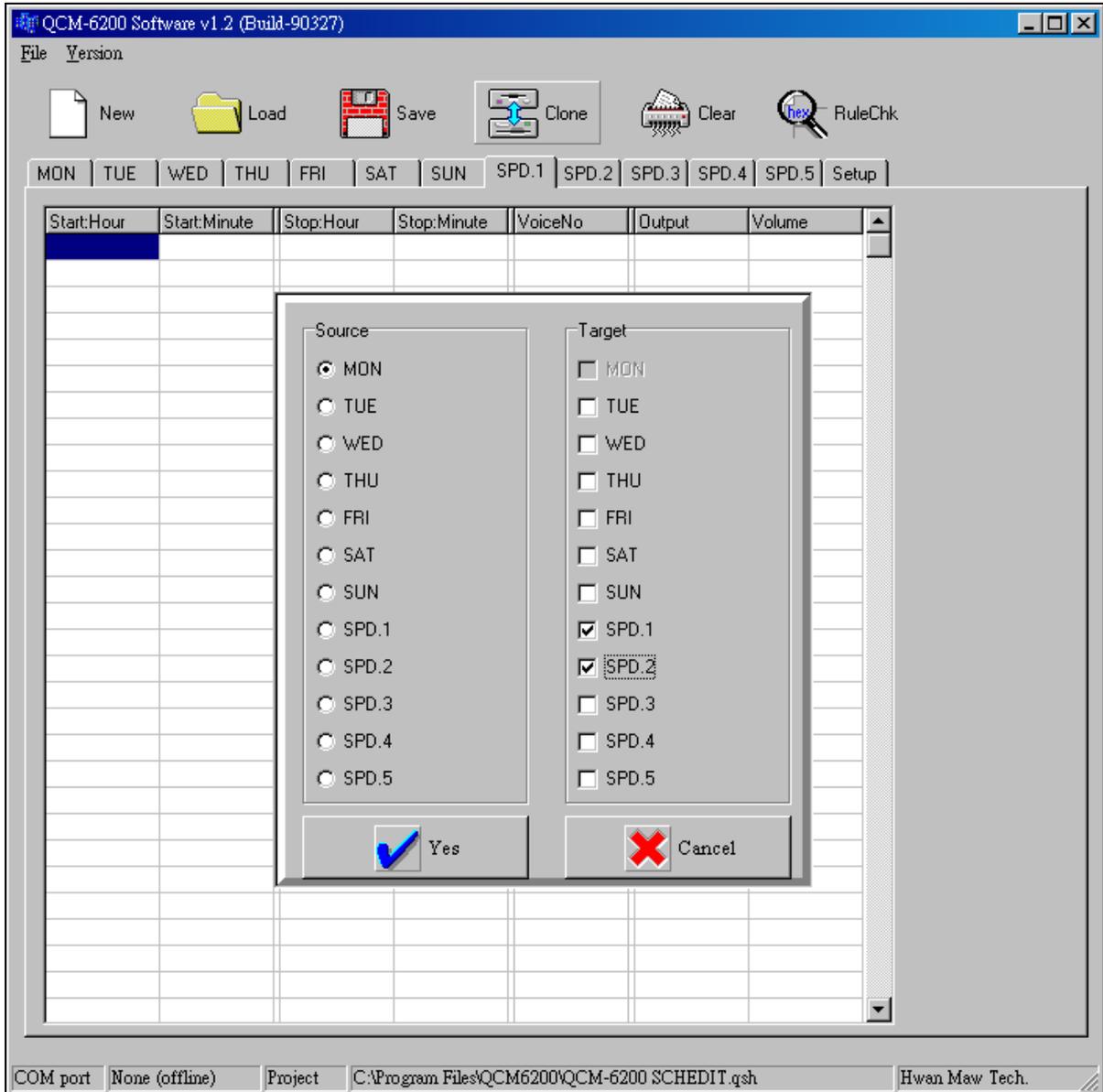


*When revise the previous file saved before, an “Overlay file” dialogue box will be shown to ask the user whether to cover the previous file or not!

3.5 Clone

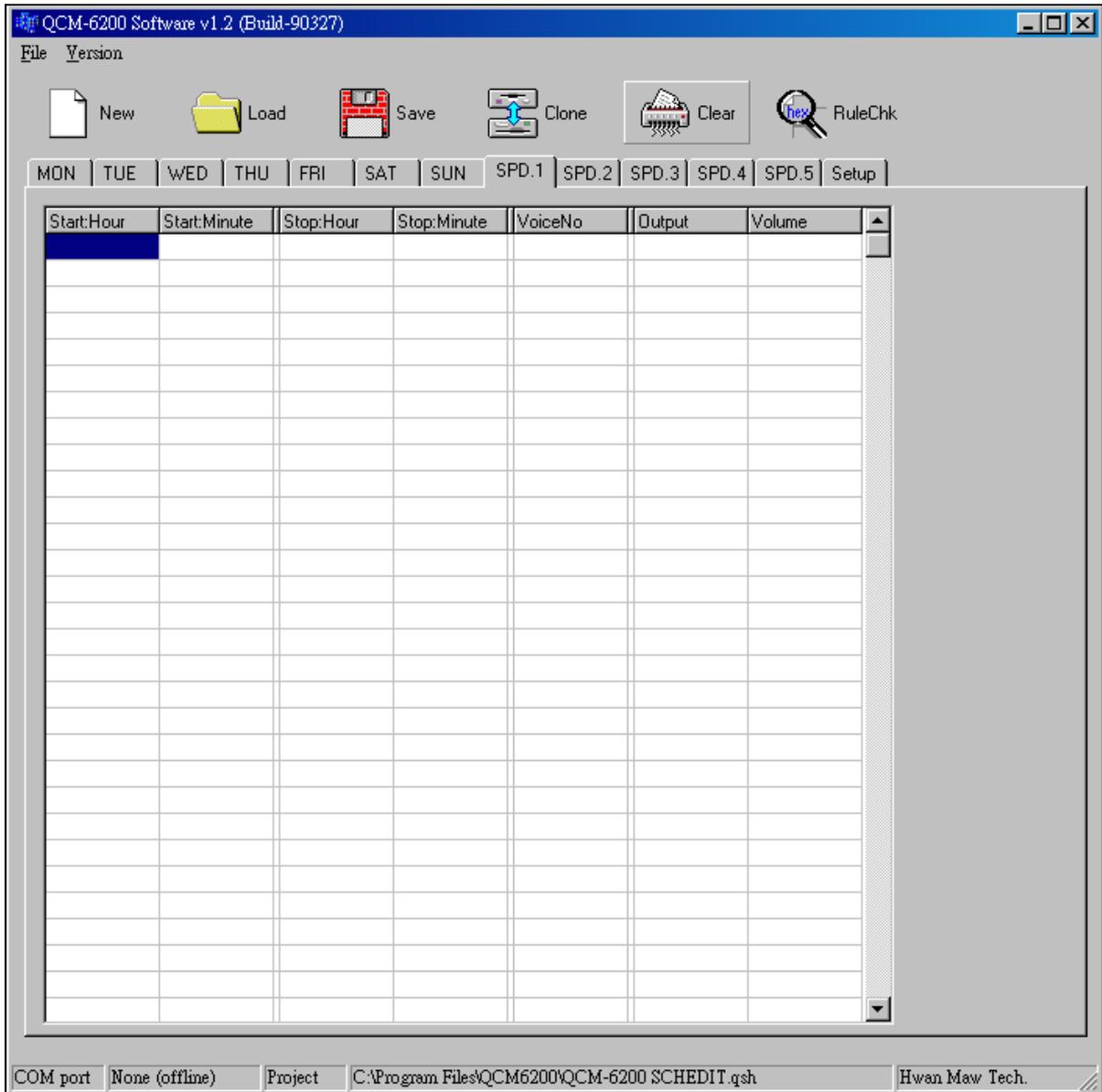
Click on “Clone” icon to open the setting box. To clone schedules by request, please open the clone data box. Tick one item (select one weekday) from the source box and some items (select more than one weekdays) from the target box! Then click on “Yes” key to make the weekdays from the targets have the same schedules as the weekday from the source box.

*As the example below: If users want to have MON schedules on SPD.1 and SPD.2, please tick SPD.1 and SPD.2 from the Target area and tick MON from the Source area. Then click on “Yes” button to complete this step!



3.6 Clear

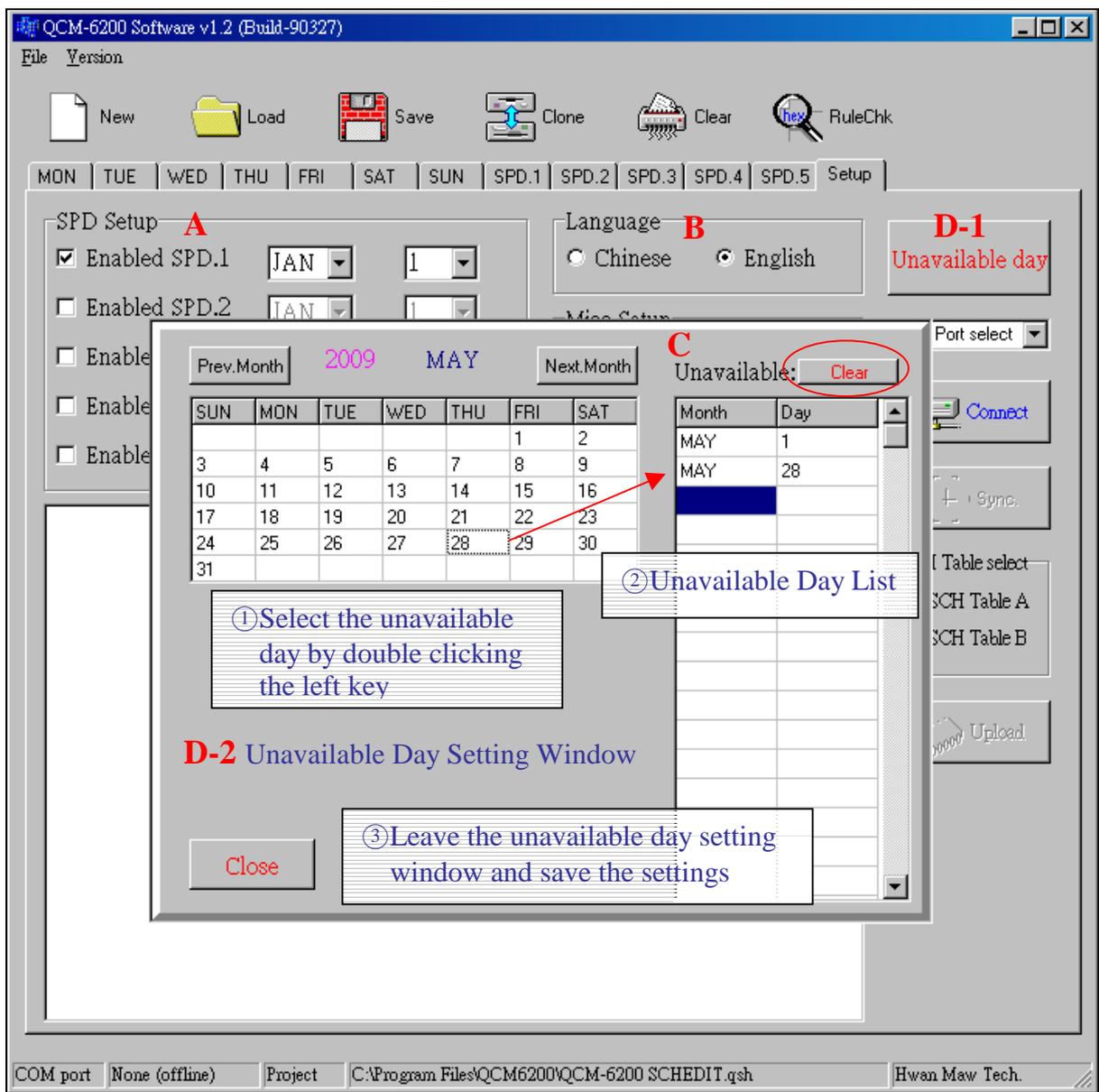
Please select the day which is planned to be deleted. Then click on “Clear” icon to **delete all the schedules on that day.**



*As the example shows-Clear all the schedules on “SPD1” immediately

3.8 System Setting

When the schedule arrangements are done, please set the related settings here and transmit them to QCM-6200G.



A SPD Setup : Select the date from the pull-down menu. Leave blanks if no SPD.

B Language : Chinese/English version for QCM-6200G system interface setting

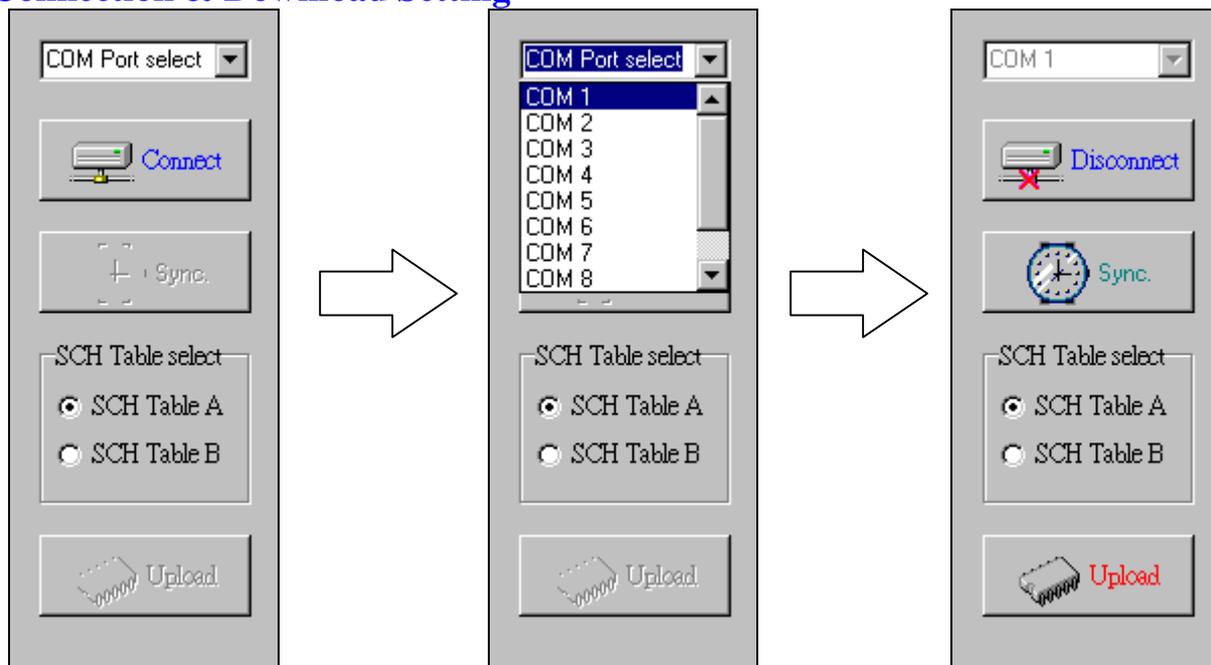
C Other Settings : time zone, GPS synchronization, Node ID (Transmit the ID via PC to QCM-6200G system).

D-1 Unavailable Day Setting : Open the unavailable day setting window to arrange the dates for unavailable day.

[Note] Click on “Clear” icon (in the red circle) to “clear all the schedules” on unavailable day immediately!!

To delete schedules on a single date, please select the preferred date. Then single click on the right key to complete this step.

3.9 Connection & Download Setting



1. Select the COM port
2. When the connection is done, “Sync.” & “Upload” functions will be valid.
3. Download the schedules: Name the schedule data (Weekday schedule, SPD schedule and SPD date setting) as Schedule A or Schedule B in QCM-6200G system!
 *Before synchronization and download, please enter the main menu→Transmission from the front LCD panel on QCM-6200G!
4. Sync. (Synchronization): Synchronize date and time in QCM-6200G with them in PC
5. Upload: When the uploading PC settings to QCM-6200G is done, QCM-6200G will reset itself and return to the standby mode!

Message Box:

Message box	Descriptions
>>>Open COM1<<<	Connection Msg.
>>>Close COM1<<<	Disconnection Msg.
*** Date & Time Sync. in QCM-6200*** ==> Send data block: 1,CRC = 99 <= ==>Date & Time Sync. Done <=	Date/Time Synchronization Msg.
Check rules in schedules..... Make “ROM” (a setting file)..... ***Updating QCM-6200 schedules*** =>Send data block: 1,CRC = 88 <= =>Schedules in QCM-6200 updated <=	Data Transmission
=>QCM-6200 respond timeout #1<=	Timeout Msg.