MACRO Manual

For MEGAsys Ver. 3.xx or above

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MACRO Manual

MACRO Command Script

Macro command script is based on individual needs to be able to program series of actions for particular event triggering. The macro command script is a series of action performed upon events triggering. The purpose is with the different type of input triggering output action.

Writing the macro command script is not a difficult job as long as the engineer has some basic knowledge. For example, the engineer must be able to tell the type of input and make the system respond accordingly. Basically, there is no limitation on the number of actions. The macro command script cannot be too lengthy, because if there is another needed event triggering happening at the same time, it will have to wait for the previous action script to finish before executing the rest. The macro command script will execute and ends till the "END" command.

Macro command script has two ways of entries:

- Direct Command Entry

  Entering the command into the action text space provided does direct entry. A comma "," divides one command after another.

  For example: ACU 001 OUT 002, ACU 001 OUF 010

  For the above example, the macro command is divided a comma ",", one action text space can only accommodate maximum 5 commands. Therefore it accepts single command, multiple commands in macro command script identify as "MAC".

  For example: MAC 001, MAC 002, ACU 001 OUF 001

MAC 001	An example of indirect command entry, where it contains multiple direct commands.
ACU 001 OUF 001	An example of direct command entry.

- Indirect Command Entry

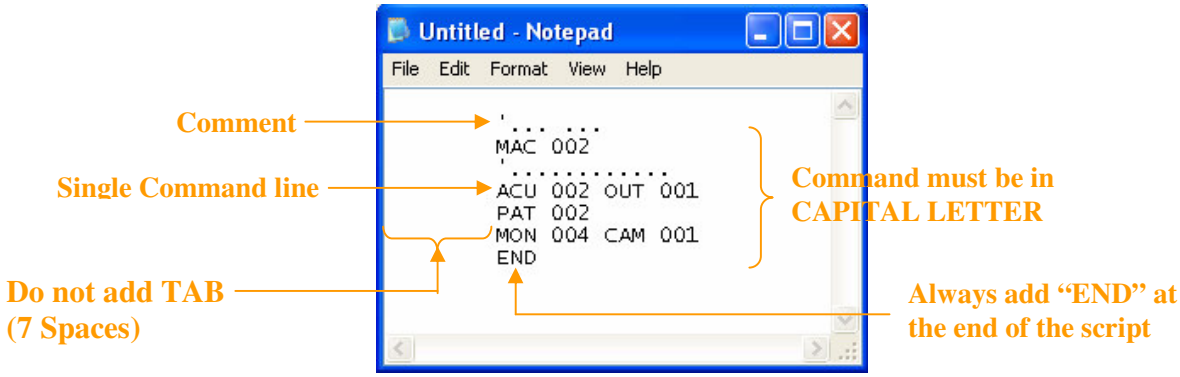
  Indirect command can be done using notepad to program. Once it is programmed, the file will be saved under "MAC" initial and 3 digits running number to represent the filename with file extension as "PRG".

  For example: MAC002.PRG

  The range of the 3 digits running number is 001 ~ 999. The macro file has to be saved under the directory /MEGASYS/MACRO.

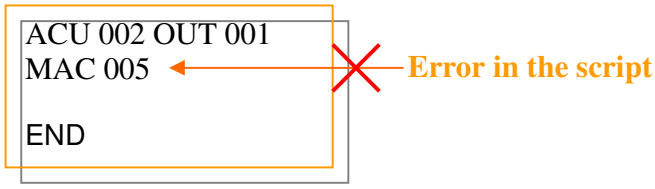
Writing Macro Command Script

Use a Text Editor like WordPad or Notepad to start writing the macro command script, or you can use the icons clicking on the left to perform the macro editing.



Programming Steps of Macro Command Script

1. Only one command entry per line
2. Using 7 spaces to initiate the start of the command. Do not use TAB key.
3. Use hyphen "'" to indicate comment.
4. Always use "END" to indicate end of script.
5. Commands used are case-sensitive. Please use CAPITAL LETTER.



Macro files naming format and storage location

- Initial of the filename start with "MAC", following by the number from 000 to 999.
- File extension is "PRG". For example, the filename with extension is MAC002.PRG
- All macro file created should placed in the /MEGASYS/MACRO directory.

Calling Macro Command Script

Series of action are written in "MAC005.PRG". For the required action interlock, just need to enter the Macro command into the text space provided.

For example: MAC 005, MAC 001

MAC 005 will directly call the file MAC005.PRG in /MEGASYS/MACRO directory.

Special Macro Command

Some commands must be entered at the required action interlock. These commands are not allow writing in the macro command script.

Alarm message display is an example of special macro command. Alarm message states the required action, to alert person-in-charge upon alarm triggering; this command has to be used directly.

For example: MAC001, MSG {M1}

MSG is term as alarm command to display the content in the file named with MSG extension. For example, the filename with extension is M1.MSG. All the MSG files must be placed under /MEGASYS directory.

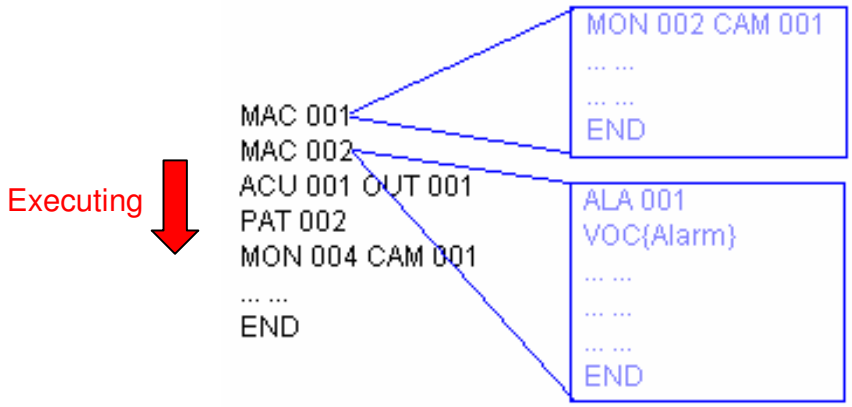
Macro Command Execution

The executing of macro command is on the queue format; first come, first serve basis. When the system is being activate to execute the macro command, MEGASYS server will queue up the necessary command and execute them one by one.

For example

Action 1: MAC 001, MAC 002, ACU 001 OUT 001

Action 2: PAT 002, MON 004 CAM 001



Macro Command

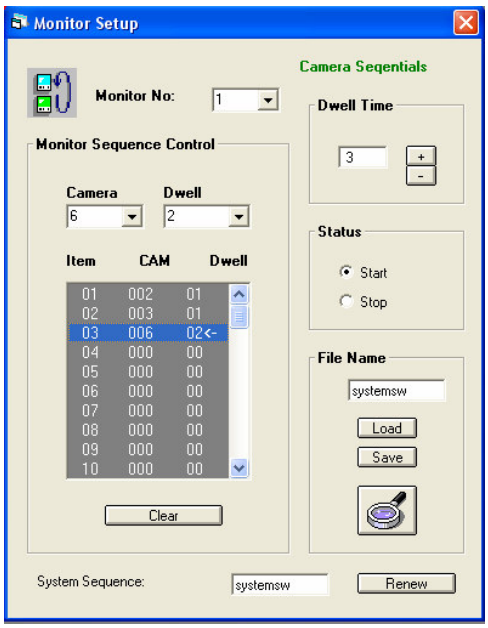
1. SEQ {xxxx}

This is a macro command that execute the file containing pre-defined camera display sequences set in the system. This is placed in Megasys Server for execution.

[Parameters]

xxxx	Name of file.

[Setup]



i. Click [System Setup] on the menu bar, choose the [Monitor Setup], and then under the first icon is the [Camera Sequence Setup] icon.

ii. A window with camera setup option for the dwell timing will be shown like the figure on the left - Monitor Setup.

iii. Under this window, select the monitor number using the down arrow key provided.

iv. Select one of the items at the table under the Monitor Sequence Control. The particular selected item will highlight in blue.

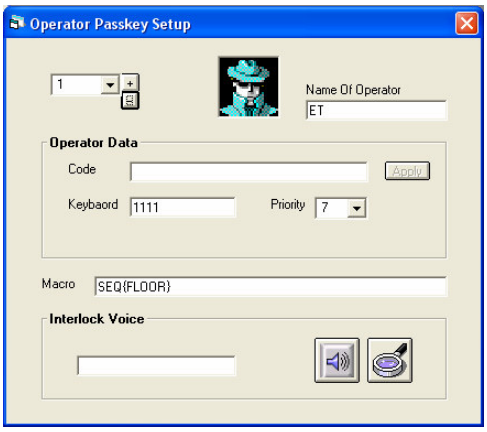
v. Select the camera.

vi. Select the dual under the Monitor sequence control.

- *Repeat step (iv) till (vi) which enable to setup the sequence of the camera display on the same monitor.*
- *Repeat step (iii) till (vi) allows setup the remaining monitors and the camera display sequence on that monitor.*

vii. Under the File Name, enter a name for this setting.

viii. Click Save icon to save the setting.



ix. Click [System Setup] on the menu bar, look for [System Setup], then click on the 2nd icon [Operator Passkey Setup].

x. A window shown up on the left - Operator Passkey Setup.

xi. Create an account for the operator or edit the necessary information need and fill in the space for macro.

[Illustration and Explanation]

SEQ {FLOOR}

Upon entering the MEGASYS SYSTEM, operator number 1 named ET, required to execute a macro command – SEQ {FLOOR}, so as to view monitor 1 and 2 to supervise the site situation.

After the operator ET has entered the password, operator may enter into the MEGASYS SYSTEM at the same time execute the macro command - SEQ {FLOOR}. In the file named FLOOR, contains the information of the monitor 1 and 2 connection to the respective cameras as shown in Table 1-1.

Monitor	Item	Camera	Monitor Dwell Time	Camera Dwell Time	Total Dwell Time
1	01	002	03	01	03
	02	003	03	01	03
	03	001	03	01	03
	04	004	03	01	03
	05	005	03	01	03
	06	006	03	01	03
2	01	007	03	01	03
	02	008	03	01	03
	03	009	03	01	03

Table 1-1Monitor Sequence setup for 1 and 2

- *This command needs to be pre-setup at the [Operator Passkey Setup] before executing. The file name has to be preset at the [monitor setup] prior to use.*

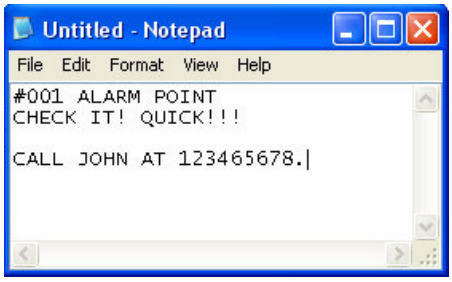
2. MSG {xxxxx}

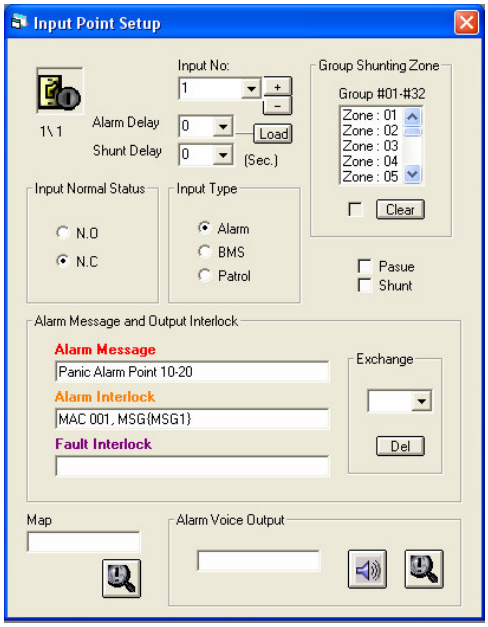
This macro command is used upon alarm triggering. Open a message file related to this alarm point. The file extension of the message file is ".MSG".

[Parameters]

xxxxx	Name of file.

[Setup]





i. Click [System Setup] on the menu bar, choose the [System setup], and then under the 6th icon is the [Macro Editor] icon.

ii. A window appears like the figure on the left - Macro Editor or Notepad.

iii. Operator can input the message which shown up upon alarm triggering. Click on new under File to create more files suitable for individual alarm point.

iv. After finishing writing the information, click on File, save the message file under /MEGASYS and exit the program.

v. Click [System Setup] on the menu bar, select [Input Setup], and under the 1st icon is the [Input Setup] icon.

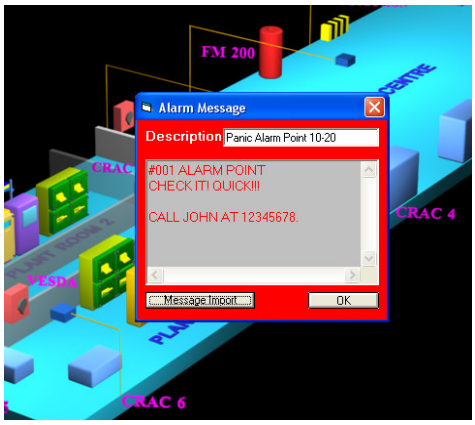
vi. A window appears like the figure on the left - Input Point Setup.

vii. Select the input number by clicking the down arrow button.

viii. Under the alarm interlock, states the interlock and file associate with this input point. For example: MAC 001, MSG{MSG1}

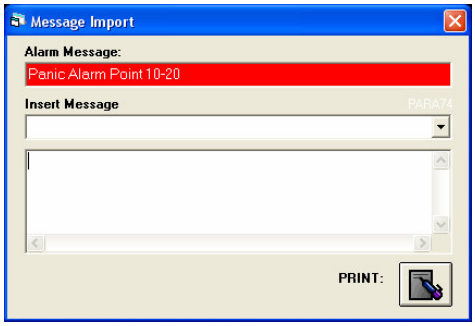
[Illustration and Explanation]

MAC 001, MSG {MSG1}



If the input point #1 is activated, input point #1 will sound out an alarm and alarm message will be shown. At the same time, the specific macro command will be executed.

MEGASYS SYSTEM will show a floor plan and the red alarm message box. The input point shown on the floor plan will keep flashing. The red alarm message box will show information related to the alarm. For example: step of action needs to carry out, contact person and number.



Carry out instructions stated in the alarm message. Alternatively, click on the Message Import button of the Alarm message to file a report.

Upon clicking on the Message Import button, a window will pop up as shown on the left - Message Import.

Under Insert Message allows making remarks on the report. Click print to file report. Acknowledge the Alarm Message by clicking the ok button.

Note: First time installing or using MEGASYS SYSTEM, Insert Message may not have any choices. Therefore, operator will have to create its own file named PARA74. Creating this file, operator can expedite filing procedure.

Creating file – PARA74:

1. *Open Notepad or WordPad, add message which is needed to fill in the report. For example: ALARM UNDER TESTING, FAULTS ALARMS, etc.*
2. *Click on File, select Save As, rename the file as "PARA74.txt", change the location to C:\MEGASYS\" and OK to save.*

Once this file is created, when there is an alarm, the operator will just need to click on down arrow beside the Insert Message, the pre-defined message is shown. The message inserted will be shown in the window below with the report time and date.

3. MON yyy CAM xxx

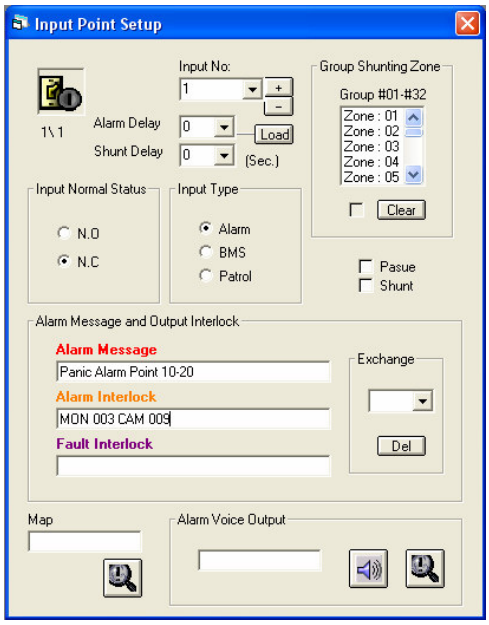
Normally, this command is used to carry out security observing operation. Allowing certain cameras' video to shown on the particular monitor, and observe that scene.

When a particular input point is activated, this macro command of this input point will be carried out. Showing certain cameras' video on single/many monitors. The operator will verify whether there is a need to inform the police after observation. There is no indication or message shown for this activation.

[Parameters]

yyy	Monitor number from 001 to 160.
xxx	Camera number from 001 to 640.

[Setup]



i. Click on [System Setup] on the menu bar, choose [Input Setup] and then under the first icon, select [Input Setup].

ii. A window appears as shown on the left - Input Point Setup.

iii. Select the Input Number, example Input #1.

iv. At the Alarm Interlock, fill in the macro command as "MON 003 CAM 009".

End of the setup.

[Illustration and Explanation]

Real Scenario: When the alarm input is being triggered, the input point will change color from yellow to red, and keep flashing non-stop.

⌦ If a person holding more than one access card standing in front of the door card reader, flashing using one of the access card. Upon flashing a card not belonging to him, the person will not be granted entry. At the same time, card reader

contains error in reading card, which send back to the system. The system will send out a signal to control the camera looking at the entry. Immediately the camera looks at the door entry and takes down the whole scene.

⌦ After the operator looks at the return video, decision will be made and action will be carried out. Either report to the police if necessary or the camera will continue to take down the activities at the door entrance.

⌦ When the video signal is captured back to the system, click on [Monitor Control], a window shown up displaying 16 numbers of monitors - Monitor Control Selection.

⌦ In the Monitor Control Selection, that particular monitor symbol is yellow in color. At this instance, the monitor is showing the camera looking at the door entrance. In a while, the monitor will also execute the previous assigned task, continuously executing in a cycle.

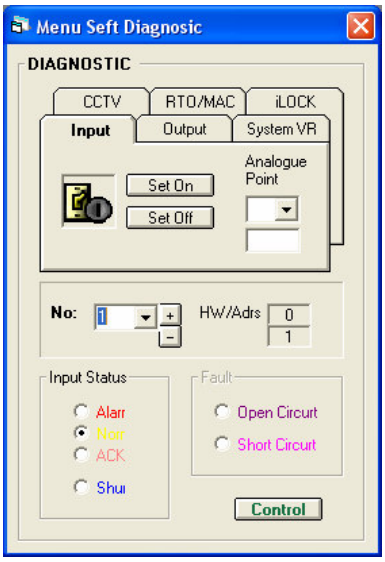
Simulate Scenario:

- Using #1 as input alarm, under alarm interlock, the command filled is MON 003 CAM 009.
- Using #34 as another input alarm, under the alarm interlock the command filled is MON 003 CAM 010.

⌦ Under normal circumstance, without alarm triggering, monitor #3 will only display pre-defined camera video. For example: Monitor #3 will continuously display camera #5 and #6 video.

⌦ When alarm happen, the icon of input point will turn to red color and keep flashing.

How to carry out simulation test?



i. Click on the [Self Diagnostic] icon from the menu bar.

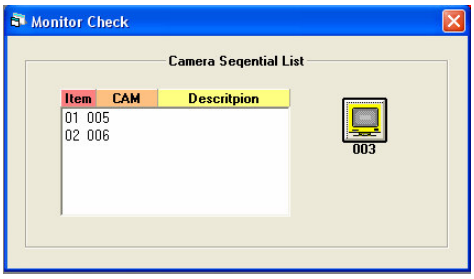
ii. A window appears as shown on the left - Menu Self Diagnostic.

iii. Choose Input under the tab bar

iv. Select the input number that needs to execute testing. For example, #1.

v. In input tab bar, click Set On.

vi. Input #1 is triggered. The color of the icon from yellow becomes red and it keeps flashing non-stop.



i. Click on the [Monitor] icon on the menu bar.

ii. A window with 16 monitor will shown. Among them, monitor #3 remains in yellow.

iii. Click on monitor #3, another window pop up as shown on the left - Monitor Check.

iv. Under the Monitor Check window, there is only camera #5 and #6 shown and not camera #9 although camera #9 is shown on the alarm interlock.

v. At this instance, camera #9 is shown on Monitor #3, but after some times, it will switch to camera #5 and #6. This cycle will continue.

If the operator test more than one input point, for example input #34. Just need to do the simulation test from start and activate input #34. When operator activate monitor #3, there is no change in the number of cameras in the monitor check. But at the monitor #3, there is a camera switch from camera #9 to 10. (If there is DVR installed, not only video can be display, video is recording too.)

- *During alarm activation, if there is video from second camera switching to monitor 3, the video from first camera will be replaced or removed.*

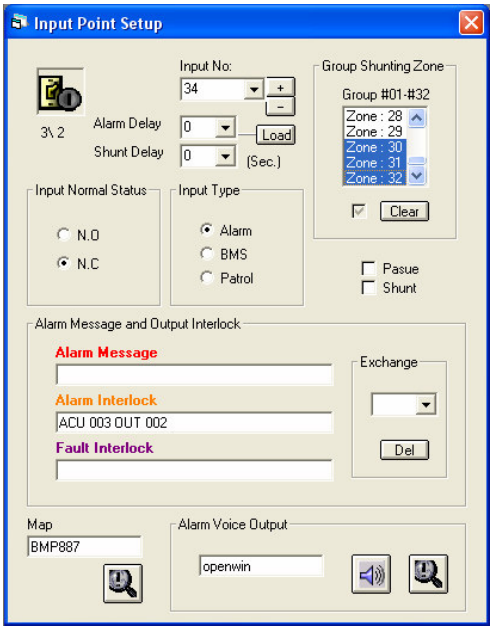
4. ACU yyy OUT xxx

When there is any incoming signal from the alarm controller, ACU, this macro command is used to output signal to the ET-8C500 or ET-8C800 to trigger police or to activate devices.

[Parameters]

yyy	Alarm controller address 001 to 255.
xxx	Output point of the alarm controller.

[Setup]



i. Click on [System Setup] on the menu bar, choose [Input Setup] and then under the first icon, select [Input Setup].

ii. A window appears as shown on the left - Input Point Setup.

iii. Select the Input Number, example Input #34.

iv. At the Alarm Interlock, fill in the macro command as "ACU 003 OUT 002".

[Illustration and Explanation]

ACU 003 OUT 002

Alarm Input type:

Input point #34 is a back door. The door is always closed at all time. When input point #34 is triggered, alarm will be triggered immediately and LED light on output point #002 of #003 of ET-8C500 will light up. Only upon acknowledge, and reset when the door is closed, then the LED light will go off.

BMS Input type:

For example, someone enters or exits the room. When Input point #34 is triggered, the icon representing this input point will turn color from yellow to greenish blue. When the input point #34 is closed back, the color of the icon will turn from greenish blue back to yellow again.

5. CAM vvv POS yyy

This macro command is to control the P/T/Z camera (CAM) and move specific (POS) preset position.

[Parameters]

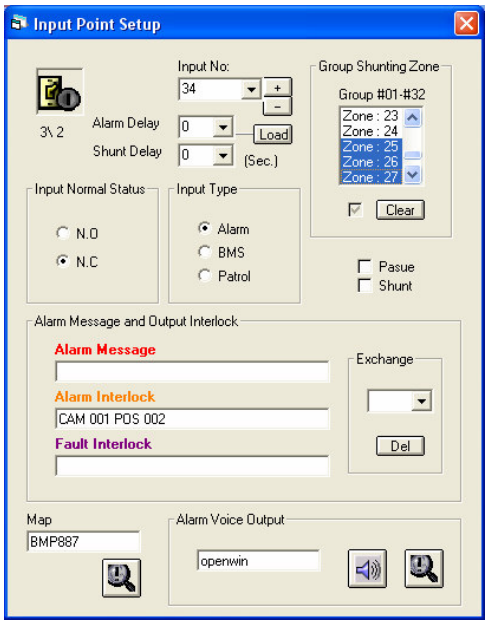
vvv	Camera number
yyy	Preset position number

Preset position must be set before use. Use the P/T/Z camera receiver/driver to setup the position. Most commonly use P/T/Z Camera receivers/drivers (for example ET ACU, STAR DOME, PELCO, PANASONIC and etc) are able to set the preset position for different position. (Please study Table 5.1).

Item	Preset Position Range	P/T/Z Camera Receiver/Driver
0	001-099	ET-50/ ET-100/ ET-200/ ET-300 ACU
1	101-164	STAR Dome
2	201-264	DIAWA DMP15 Dome
3	301-310	Pelco 9750/60 Matrix Bay
4	401-414	SANYO Dome
5	501-520	PELCO Direct Dome (D-Type)
6	601-664	Panasonic X550 Matrix Bay
7	701-7xx	Lilin PIH-717X Speed Dome
8	801-8xx	Panasonic CS-850/854 Dome
9	901-964	MEGAsys Speed Dome

Table 5-1 Preset Position Range for different type of P/T/Z Camera Receiver/Driver

[Setup]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon after clicking which is the [Input Setup].

ii. A window appears as shown on the left - Input Point Setup.

iii. Select the Input Number, example Input #34.

iv. At the Alarm Interlock, fill in the macro command as "CAM 001 POS 002".

[Illustration and Explanation]

Imagine: POS 002 is the preset position looking at the entrance. CAM 001 is the camera for the entrance.

In a particular company, after office hour, there will be no one staying in the office. Suddenly, the alarm for the input point #34 has been activated. Possibilities are there can be someone break-in or burglary. Immediately, input point #34 will activate the system to carry out the command. Command the CAM 001 moves to POS 002 to and records the happening. Refer to Figure 5-1 below.

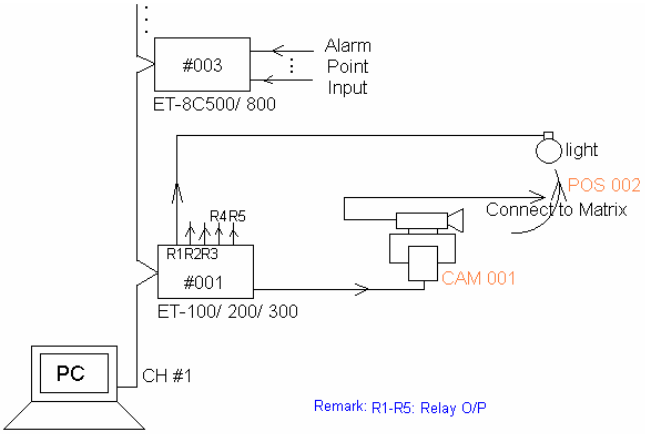


Figure 5-1 Shift Camera Position Upon alarm

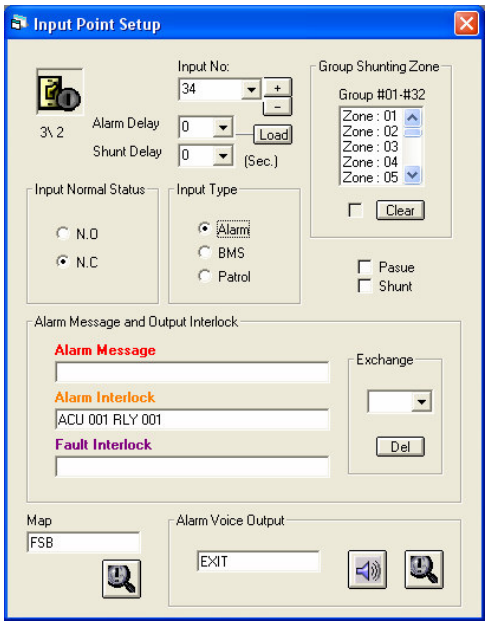
6. ACU xxx RLY yyy

This macro command is to activate some devices connected to the relay of ET Receiver/Driver. The devices can be lighting bulbs or similar.

[Parameters]

xxx	Address of ET Receiver/Driver except ET-50
yyy	Relay output point number to drive device

[Setup]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon after clicking which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #34.

iv. At the Alarm Interlock, fill in the macro command as "ACU 001 RLY 001".

[Illustration and Explanation]

Imagine: Let ACU 001 is the address ET Receiver/Driver.

Let RLY 001 is the relay output point number to drive device.

When certain device is triggered, this device will activate the ET Receiver/Driver. Upon receiving the activation signal, the ET Receiver/Driver will send the signal back to MEGASYS SYSTEM. From there MEGASYS SYSTEM will send out the appointed command to the respective ET Receiver/Driver to activate the output.

For instance, input point #34 is being triggered, and there will be a signal send to ET-8C500.When ET-8C500 received the signal; ET-8C500 will send the signal back to

MEGASYS SYSTEM. Immediately, MEGASYS SYSTEM will execute the macro command “ACU 001 RLY 001”, under the alarm interlock.

Macro command under this alarm interlock includes CAM 001 POS 002 and ACU 001 RLY 001. Camera #1’s position will move to #2. The ET100 as #1 will activate the relay #1 and turn on the device that connects to the relay, for example, lighting bulbs. Under this example, the lighting can help the camera to record scene where lighting is insufficient.

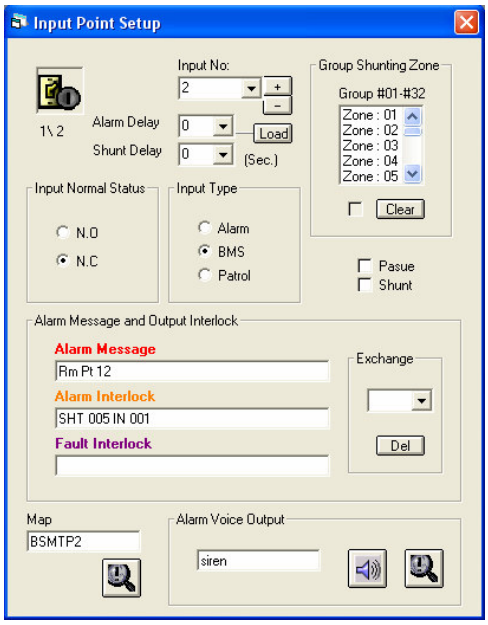
7. SHT xxx IN yyy

This macro command is almost similar to macro command in point 8. The difference is this command does not require memorizing the number alarm input point (1-2048). When a particular input point is turn on, it will make the appointed alarm input point to bypass (shunting).

[Parameters]

xxx	Address of 8C500 or 8C800
yyy	Input point of the 8C500 or 8C800

[Setting]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon after clicking which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #2.

iv. At the Alarm Interlock, fill in the macro command as "SHT 005 IN 001".

[Illustration and Explanation]

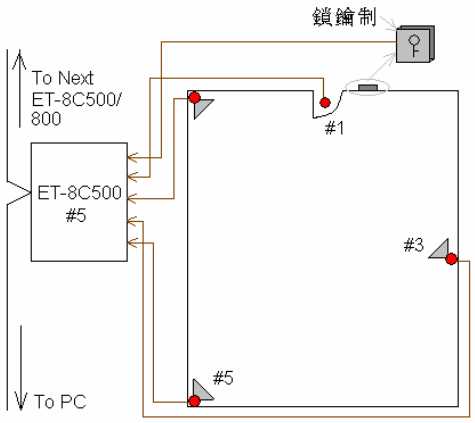


Figure 7-1 Inputs plant in the shop

	Representation in Macro Command 8 (SHZ xxxx)
SHT 005 IN 001	Representing alarm input point 10
SHT 005 IN 003	Representing alarm input point 12
SHT 005 IN 005	Representing alarm input point 15

There is this particular shop. There is a key switch at the door entrance. So before the owner open the entrance of the shop, the key switch will have to be turn to off position. In this case, the MEGASYS SYSTEM will perform the macro command as stated above to shunt the alarm input (Input point #1, #3, #5 of ACU #5 ET-8C500/8C800). There will be no alarm activation when the owner entered the shop.

Before the owner closed the shop and left, the key switch will have to turn to on so as to disable the shunt. MEGASYS SYSTEM cancels the shunting and put the shop in security active. If anyone entered the shop, the alarm system will be activation and carry out pre-defined instructions.

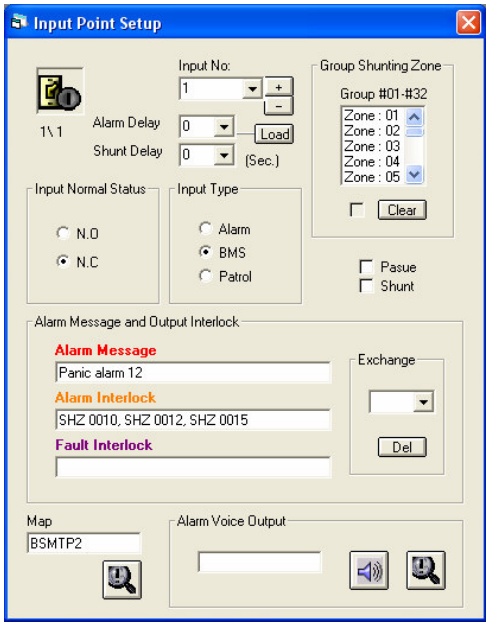
8. SHZ xxxx

This macro command is almost similar to macro command in point 7. The difference is this command required to memorize the number alarm input point (1~2048). When a particular input point is turn on, it will make the appointed alarm input point to bypass (shunting).

[Parameters]

xxxx	Alarm input point (1 ~ 2048)

[Setup]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon after clicking which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #1.

iv. At the Alarm Interlock, fill in the macro command. For example, SHZ 0010, SHZ 0012, SHZ 0015.

[Illustration and Explanation]

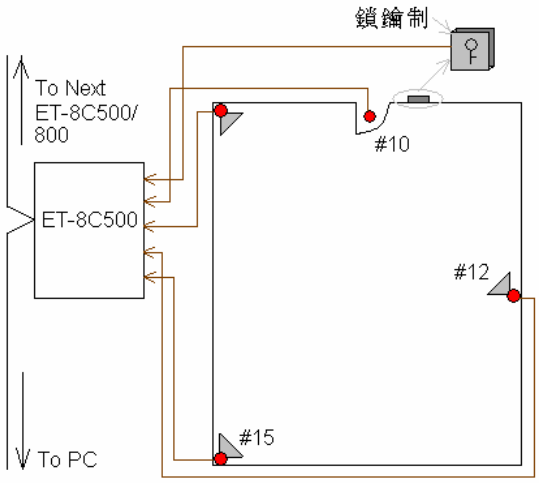


Figure 8-1 Inputs **plant in the shop**

	Representation in Macro Command 7 (SHT xxx IN yyy)
SHZ 0010	Representing at ACU #5, alarm point #1
SHZ 0012	Representing at ACU #5, alarm point #3
SHZ 0015	Representing at ACU #5, alarm point #5

There is this particular shop. There is a key switch at the door entrance. So before the owner open the entrance of the shop, the key switch will have to be turn to off position. In this case, the MEGASYS SYSTEM will perform the macro command as stated above to shunt the alarm input (Input point #1, #3, #5 of ACU #5 ET-8C500/8C800). There will be no alarm activation when the owner entered the shop.

Before the owner closed the shop and left, the key switch will have to turn to on so as to disable the shunt. MEGASYS SYSTEM cancels the shunting and put the shop in security active. If anyone entered the shop, the alarm system will be activation and carry out pre-defined instructions.

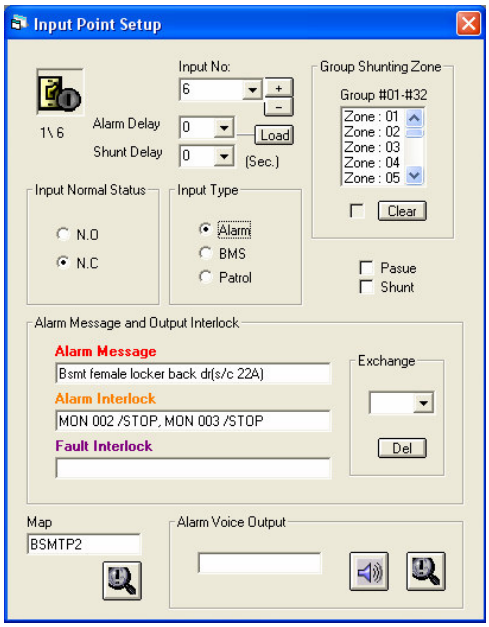
9. MON xxx STOP/AUTO

When some incidents happen, this macro command is used to make the particular monitor to freeze temporary (MON xxx /STOP), or to make the monitor resume back to normal operation (MON xxx /AUTO).

[Parameters]

xxx	Monitor number (1 ~ 160)

[Setup]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon after clicking which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #6.

iv. At the Alarm Interlock, fill in the macro command. For example, MON 002 /STOP, MON 003 /STOP.

[Illustration and Explanation]

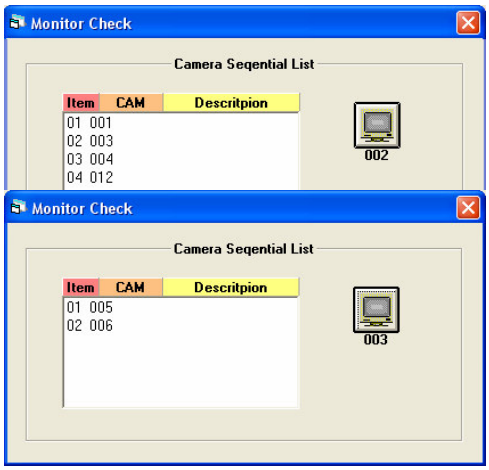
MON 002 /STOP, MON 003 /STOP

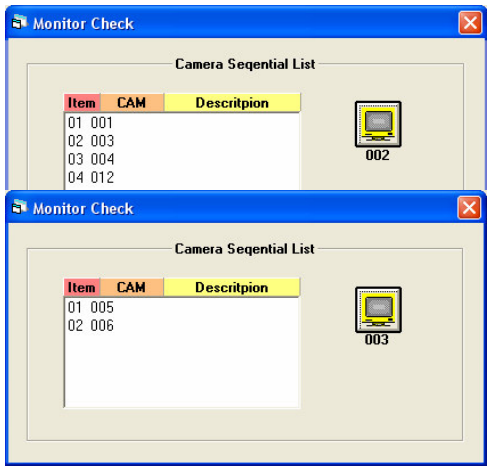
For instance, there is a particular building; it has 16 monitors accountable for all the alarm input points. During normal operation, the 16 monitors will act according to pre-defined instruction; continuously changing the camera video on the monitors.

When one alarm point is triggered, and happened that there is a camera nearby is displayed on the monitor. The alarm interlock of the alarm point will be executed and instructed to stop the display on the monitor temporary. In this case, the operator will be able to know precisely the video on that monitor is representing the alarm point.

For example the camera looking at the scene near alarm input point #6 is displayed on Monitor #1. When alarm input point #6 is triggered, after MEGASYS SYSTEM received this signal, MEGASYS SYSTEM executes the macro command under the alarm interlock. Video switching on Monitor #2 and #3 stops temporary.

When operator clicks on [Monitor Control], a window pops up which displays 16 monitors - Monitor Control Selection.





At this instance, operator moves mouse cursor to Monitor #2 and right-click. The Monitor Check window for Monitor #2 shown up and the video on the monitor has stopped (icon not highlighted in yellow). For Monitor #3 is the same situation as Monitor #2 meaning the macro command is in operation.

If the alarm input point #6 has normalized, operator will have to activate monitor back to normal operation. At Monitor #2, under Monitor Check window, move the cursor to the icon and left-click. The respective monitor will restart to execute the pre-defined instruction (icon highlighted in yellow), same instruction for Monitor #3.

MON 001 /AUTO, MON 002 /AUTO

For illustration, when one employee returns back to company in the morning and every time this employee needs to view some monitors. For convenience, employee can setup MEGASYS SYSTEM such that every morning, the MEGASYS SYSTEM will turn on these monitors. When this employee enters into MEGASYS SYSTEM, these monitors can be turned on at the same time without the need to turn on individually. Therefore, making use of this macro command can really help to save a lot of time.

- *This macro command can be placed at the macro under [System Setup], [System Setup], [Operator Passkey Setup] using the specific employee's account.*
- *Before each and every monitor can perform image capturing or record certain specific cameras, pre-setup is needed.*

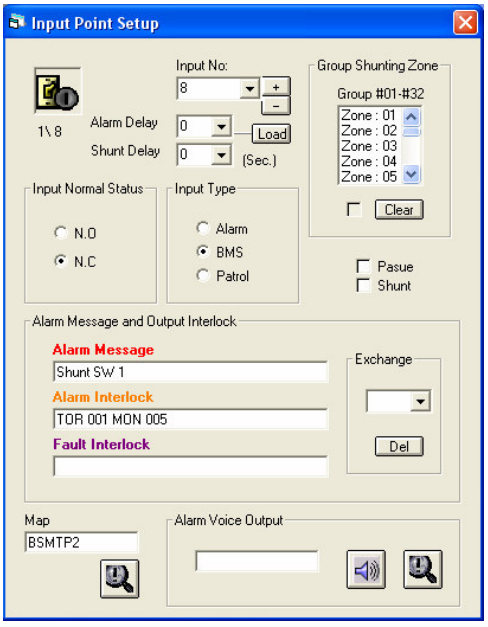
10. TOR xxx MON yyy

This macro command is used when an alarm input point is triggered, to activate the particular video tour with the camera(s) and displayed on the individual monitor.

[Parameters]

xxx	Video tour number from 001 to 099
yyy	Monitor number from 001 to 160

[Setup]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon after clicking which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

v. Select the Input Number, example Input #8.

vi. At the Alarm Interlock, fill in the macro command. For example, TOR 001 MON 005.

[Illustration and Explanation]

TOR 001 MON 005

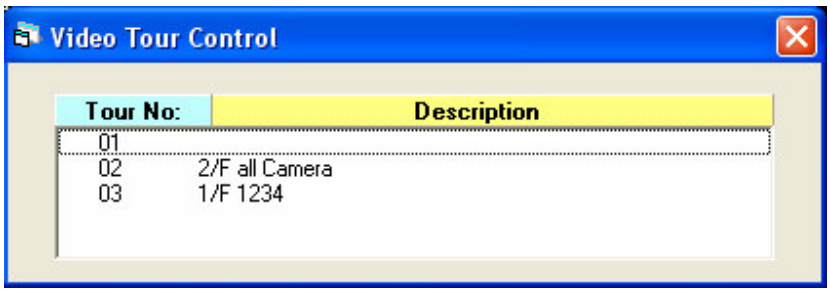
For example, alarm input point #8 at the entrance of a particular company is triggered and the macro command under the alarm interlock will be executed. Monitor #5 will based on pre-defined setup, immediately demonstrate camera video in video tour #1. Demonstration of each camera is based on one second sequencing.

Note:

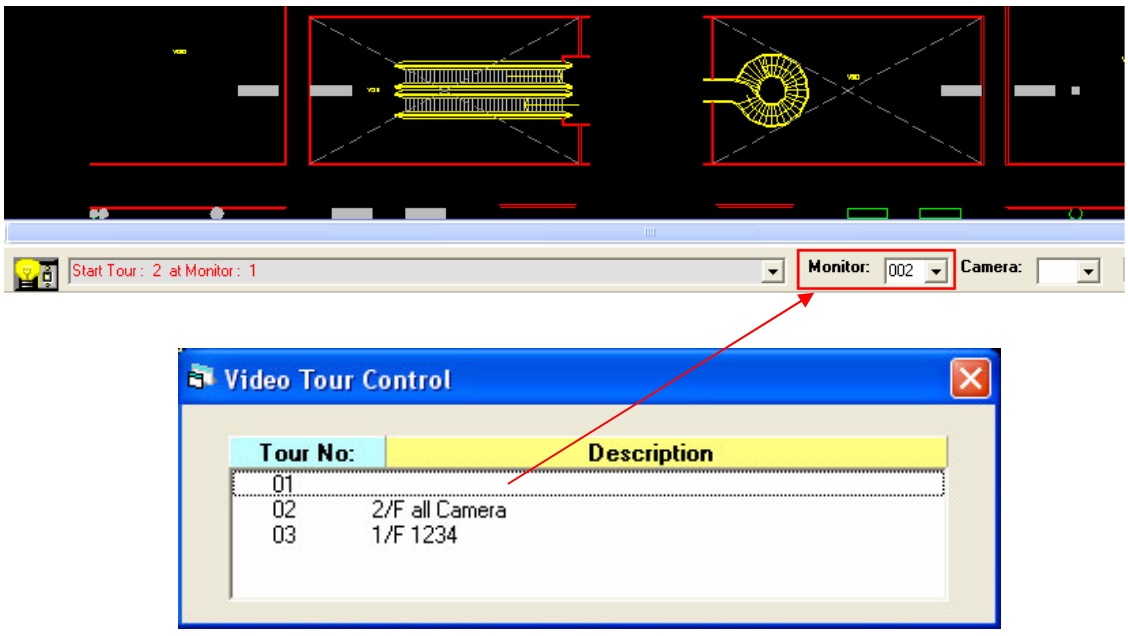
- *The video tour can be executed at any time. Normally used to investigate the monitor whether faulty, working properly or view the camera at the video tour whether it follows pre-defined sequences.*

- *The operator has to pre-setup the video tour for each given video tour number. Under the menu bar, look for [System Setup], then the [Monitor Setup], lastly click on [Video Tour Setup] icon.*

- *After the setup, close the [Video Tour Setup] windows for the setting to take effect. Under the menu bar, look for [Video Tour]. Upon clicking on that icon, there will be a window pop up as shown on the window below. The window lists down the tour number and the name of the video tour.*



- *If there is a need to execute investigation, operator will only need to specify the monitor number at the MEGASYS SYTEM and will be able to view the video tour on that monitor.*



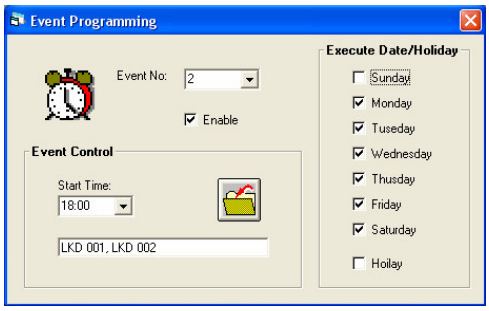
11. LKD xxx

When time is up, some of the doors are required to close or during alarm triggered, certain doors are required to close automatically. This macro is used to fulfill this requirement. Normally, this macro command is used together with the ULD (in point 12) macro command.

[Parameters]

xxx	Door number from 001 to 060

[Setup]



i. Click on the [System Setup] icon and select [Time Events] icon located near to the bottom of the [System Setup] window.

ii. A window appears as shown on the left - Event Programming.

iii. Select the Event Number by the down arrow, example Event No. #2.

iv. Under the Event Control, fill in the start time to execute the macro command.

v. At the execute macro command space provided; fill in the required macro command. For example, LKD 001, LKD 002.

vi. Under execute Date/Holiday, choose the execution day or only execute on holiday. For example, Monday till Saturday.

vii. For all settings done in Event Programming, click on the "save" icon to save the setup.

[Illustration and Explanation]

Start Time	Execute Macro Command
17:30	LKD 001, LKD 002
09:00	ULD 001, ULD 002

LKD 001, LKD 002

A company office-operating hour is from 0900 to 1730. When time reaches 1730, MEGASYS SYSTEM will automatically executes the macro command in Event No. #2, locking Door #1 and #2. If there is any employee working overtime, these employees will need to flash their access card at the reader in order to open these doors either to access to other parts of the company or to leave the company.

These macro commands have to pre-determine in the event programming in order to execute when time reaches.

ULD 001, ULD 002

On the next day 0900, MEGASYS SYSTEM will automatically execute the macro command in Event No. #1. This unlocks Door #1 and #2, which was locked up last evening.

In this case, all employees can entered or exit the company without flashing their access card. But anyone who comes in earlier than 0900 will require flashing their access card at the reader, after verification, and then only permission is given to enter.

Maybe there are more than one macro command needed to execute and the space given is limited, operator can write it in the macro command script, and save it under the “PRG” file extension as MACxxx.PRG. Therefore, in the space given, fill in the macro command “MAC xxx” for the macro command script and xxx is the MACRO file number. The execution of the macro command is the same as written in the script.

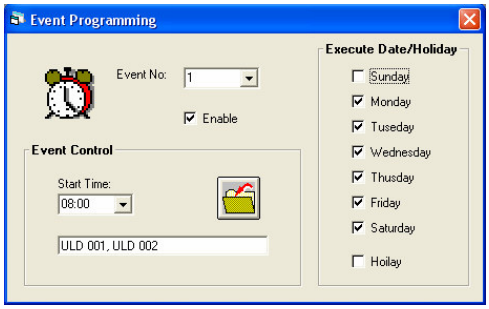
12. ULD xxx

When time is up, some of the doors are required to open or during alarm triggered, certain doors are required to open automatically. This macro is used to fulfill this requirement. Normally, this macro command is used together with the LKD (in point 11) macro command.

[Parameters]

xxx	Door number from 001 to 060

[Setup]



i. Click on the [System Setup] icon and select [Time Events] icon located near to the bottom of the [System Setup] window.

ii. A window appears as shown on the left - Event Programming.

iii. Select the Event Number by the down arrow, example Event No. #1.

iv. Under the Event Control, fill in the start time to execute the macro command.

v. At the execute macro command space provided; fill in the required macro command. For example, ULD 001, ULD 002.

vi. Under execute Date/Holiday, choose the execution day or only execute on holiday. For example, Monday till Saturday.

vii. For all settings done in Event Programming, click on the "save" icon to save the setup.

[Illustration and Explanation]

Example for this macro command, please refer to macro command point 11.

13. MAP {Map File}

This macro command is used under certain circumstances, opening up specific drawing or map. But this map or drawing will have to be stored in the MEGASYS SYSTEM.

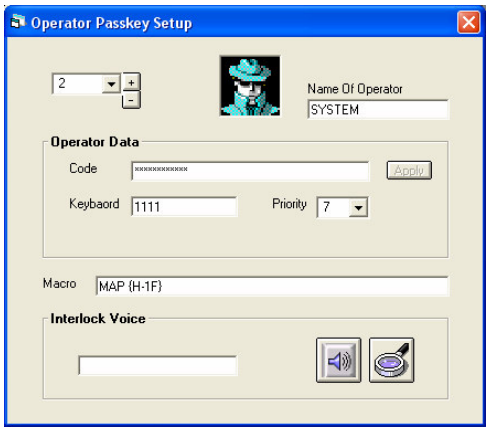
[Parameters]

Map File	Name of the specific file to be opened (BMP files)

[Setup]

In MEGASYS SYSTEM, there are several situations and ways to use this macro command.

[Example 1]



i. Click [System Setup] on the menu bar, look for [System Setup], and then click on the 2nd icon [Operator Passkey Setup].

ii. A window shown up on the left - Operator Passkey Setup.

iii. Choose the operator number from the down arrow or increase with the positive icon (+) to increase the number or the negative icon (-) to reduce the number.

- *Select a new operator number for the operator if the account is not there.*

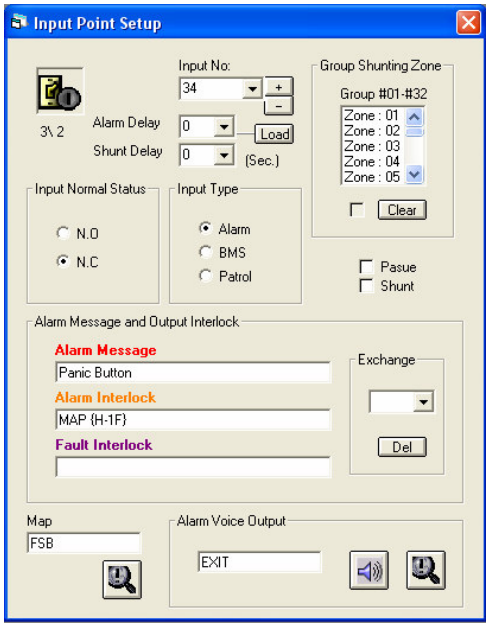
iv. On the left-hand size of the window, it displays the name of the operator.

- *If it is a new operator number, fill in the name of the operator. At the same time, input the operator data like the system code, priority and keyboard password if needed.*

v. Under this macro, input the macro command in the space given. For example, MAP {H-1F}.

vi. Close the Operator Passkey Setup window to save settings.

[Example 2]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #34.

vii. At the Alarm Interlock, fill in the macro command. For example, MAP {H-1F}.

[Illustration and Explanation]

MAP {H-1F}

[Example 1]

Operator has pre-setup the system. Hence, when the operator entered into MEGASYS SYSTEM, inputting the operator name and password, the MEGASYS SYSTEM will automatically execute the macro command specified in the Operator Passkey Setup upon successful login. The map file named H-1F will automatically displayed.

Purpose: Save the hassle to find the map file, convenience and protection reason because not all the file maps are allowed to view by others.

[Example 2]

For instance, an alarm point at the entrance #34 is being triggered, other than executing the alarm procedure, at the same time it executes the macro command at the alarm interlock of alarm point #34. Opening up the map file (H-1F.BMP), so that the operator will be able to know the triggered place and actual position conveniently.

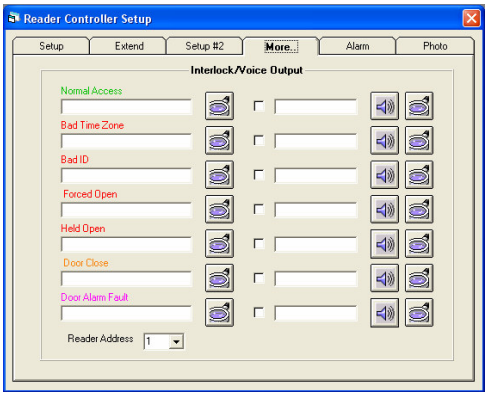
14. VOC {Sound File Name}

This macro command is used to open up sound file. All these sound files are utilized as a notification purpose. The usages for this command are quite diversified. For example entering or exiting the MEGASYS SYSTEM, alarm notification, patrolling and etc. Before using this macro command, all sound files must be kept inside the MEGASYS SYSTEM.

[Parameters]

Sound File Name Name of the specific file to be opened (WAV files)

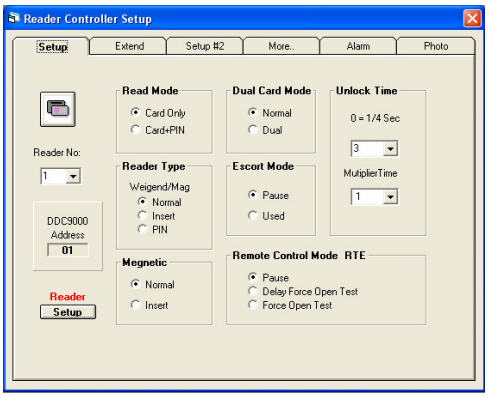
[Setup]



i. Click on the [System Setup] icon and look and click on [Access Control Setup] icon. Next select the sixth icon which is the [Card Reader Setup].

ii. A window appears as shown on the left, Reader Controller Setup with total of 6 tab windows.

iii. At the first tab that is the setup, select the address of the card reader.



iv. Select the tab number 4 which show More setup

v. Under this setup, there are many type of interlocking output that requires suitable macro command. For example under the second interlock, Bad Time Zone, add voice file, so as to notify operator that bad time zone occurs.

[Illustration & Explanation]

VOC {ERROR}

In a company, all doors are divided into many zones. Some zones have range of time permitting entry and also time that refuses entry. Some zones are not granted to all employees.

An employee with access level #2, granted to access door #5. The time range for this door is from 10:00 ~ 12:00 and 15:00 ~ 17:00. One day, this employee forgot the time and flash it's access card at the reader, the #5 reader reads the card and found that the card is used in Bad Time Zone. Immediately the MEGASYS SYSTEM will play the voice file to notify the duty operator in-charge.

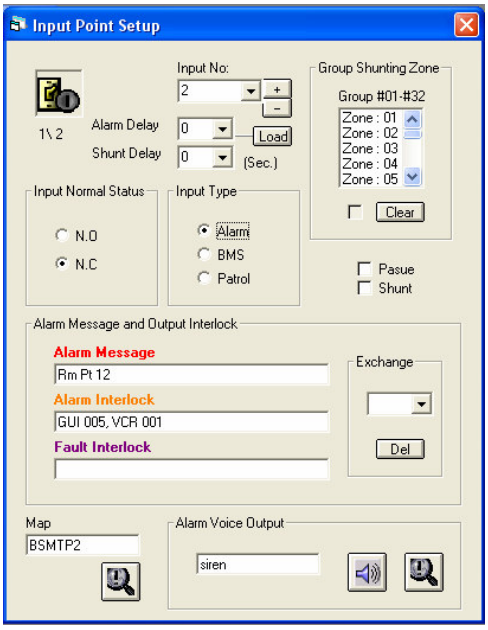
15. VCR xxx

This macro command is used to record received video images from several media sources.

[Parameters]

xxx	Number of video images recorded from 001 to 004

[Setup]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #2.

iv. At the Alarm Interlock, fill in the macro command. For example GUI 005, VCR 001.

[Illustration and Explanation]

For instance, alarm input #2 is triggered, MEGASYS SYSTEM will execute the macro command specify at the alarm interlock.

For example	GUI 005	Display the video of camera #5 through Matrix channel #2 on the GUI
	VCR 001	Record video transmitted back on VCR #1.

In MEGASYS SYSTEM, after pressing the replay button, video that is transmitted back will be shown. At the same time, recording down the video.

16. GUI xxx

This macro command is used to channel various videos from different media channels (matrices), and display it on the GUI.

[Parameters]

xxx	Camera number

[Setup]

For this section, please refer to this manual on macro command point 15.

[Example]

For this section, please refer to this manual on macro command point 15.

- *Different media channels numbers – operator should setup the channels number at the matrices. At the viewing system, add in the macro command at space given in the interlock.*

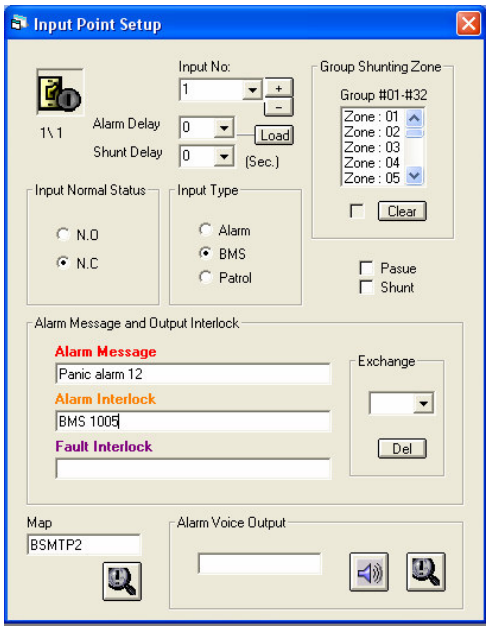
17. BMS xxxx

This macro command is utilized such that while the alarm input point is affected, the signal is sent to communication port 4 from the MEGASYS SYSTEM. The communication port 4 is using RS-232 communication protocol and the signal is sent to BMS system for notification.

[Parameters]

xxxx	Number from 0001 to 9999

[Setup]



i. Click on the [System Setup] icon. Look for and click on [Input Setup] icon. Select the first icon which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #1.

iv. At the Alarm Interlock, fill in the macro command. For example BMS 1005.

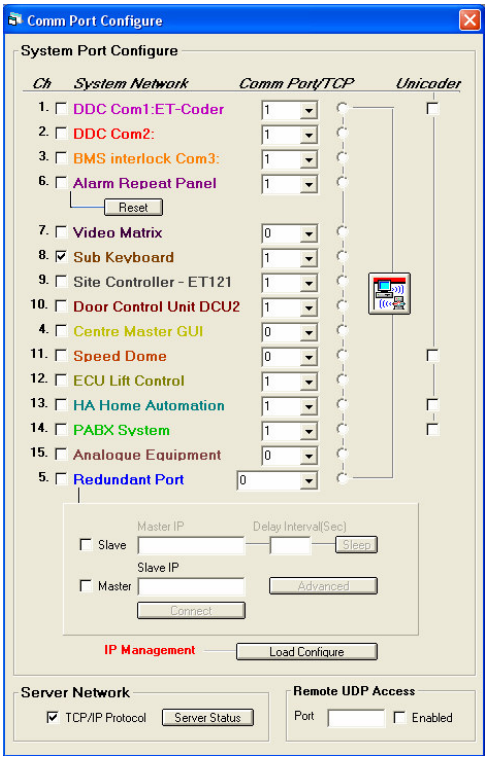
[Illustration and Explanation]

BMS 1005

Case like when alarm input point #1 is alarmed. Through the alarm controller (Example ET-8C500/ET-8C800), the received signal will be send to the MEGASYS SYSTEM. MEGASYS SYSTEM will execute the command under alarm interlock. For illustration, under the alarm interlock of Alarm input point #1, the command written is BMS 1005. MEGASYS SYSTEM will send 1005 from the channel 4 communication port through RS-232 to the BMS SYSTEM.

BMS SYSTEM will see that alarm input #1 is being triggered. At the same time, the BMS SYSTEM will study the 1005 signal, and execute the action which interpreted from the meaning of this signal.

Note: Before using this macro command, operator has to pre-setup channel 4 communication port.



i. Click on the [System Setup] icon. Look and click on [System Communication] icon.

ii. A window appears as shown on the left, Comm. Port Configure.

iii. Select the ch#8 for the Sub Keyboard. Check the checkbox beside it.

iv. Under the same item chosen, choose the right communication port channel by clicking the arrow to give the drop down list.

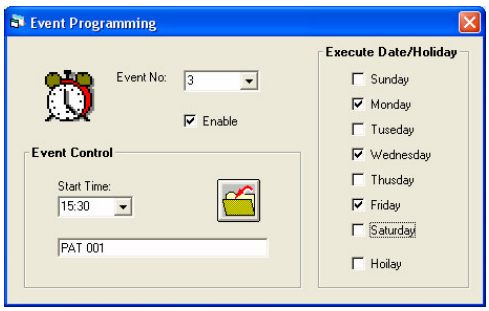
18. PAT xxx

This macro command is used for patrol purpose. When specific timing has reached, the patrol group will execute patrolling, which marked the start of the patrol.

[Parameters]

xxx	Patrol group number from 001 to 024

[Setup]



i. Look for [System Setup] in the menu bar, select [Time Events] icon located near to the bottom of the [System Setup] window.

ii. A window appears as shown on the left - Event Programming.

iii. Select the Event Number by the down arrow, example Event No. #3.

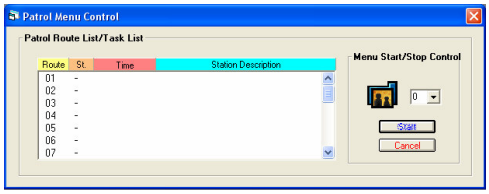
iv. Under the Event Control, fill in the start time to execute the macro command.

v. At the execute macro command space provided; fill in the required macro command. For example, PAT 001.

vi. Under execute Date/Holiday, choose the execution day or only execute on holiday. For example, every Monday, Wednesday, and Friday at 15:30.

vii. Remember to enable the event for execution when times up. For all settings done in Event Programming, click on the "save" icon to save the setup.

How to identify that correct patrolling is carried out?



i. Look for [System Setup] in the menu bar, select [Patrol Setup] and under which, pick the first icon [Patrol Control/Status].

ii. A window appears as shown on the left – Patrol Menu Control.

- Upon operator opens this window, the person will be able to realize the current patrolling information. The ways to setup the patrolling information, please refers to the MEGASYS SYSTEM Programming Manual Version 2.0, Chapter 8 (Patrol Tour).

[Illustration and Explanation]

PAT 001

A particular building, patrol guards will have to perform patrolling 17 times a day. If there is a patrolling needed to start at 15:30, when time reached, patrol guards will have to start patrolling. In the MEGASYS SYSTEM, the patrolling instruction will be executed automatically. Operator could monitor the status of the patrol under [Patrol Control/Status]. MEGASYS SYSTEM allows maximum 24 patrol route to be executed at the same time.

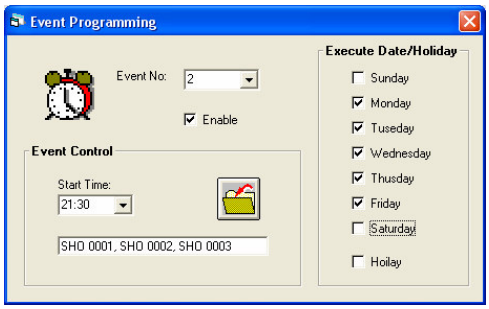
19. SHO xxxx

This macro command is used to restore the security of the specific alarm input point. Often used together with the SHM macro command in this manual point 46.

[Parameters]

xxxx	Alarm input point from 0001 to 2048

[Setup]



i. Look for [System Setup] in the menu bar, select [Time Events] icon located near to the bottom of the [System Setup] window.

ii. A window appears as shown on the left - Event Programming.

iii. Select the Event Number by the down arrow, example Event No. #2.

iv. Enter the Start Time that needs to execute the macro command. For example, 21:30.

v. At the execute macro command space provided; fill in the required macro command. For example, SHO 0001, SHO 0002, SHO 0003.

vi. Under execute Date/Holiday, choose the execution day or only execute on holiday.

vii. Remember to enable the event for execution when times up. For all settings done in Event Programming, click on the "save" icon to save the setup.

[Illustration and Explanation]

SHO 0001, SHO 0002, SHO 0003

In a particular company, there is a need to install security system and this system will need to execute action at a specific timing. When times up, (maybe the time of main entrance of the building) 21:30, MEGASYS SYSTEM installed in the company will execute this script. The status of alarm input point #1, #2 and #3 will be restored to secure mode.

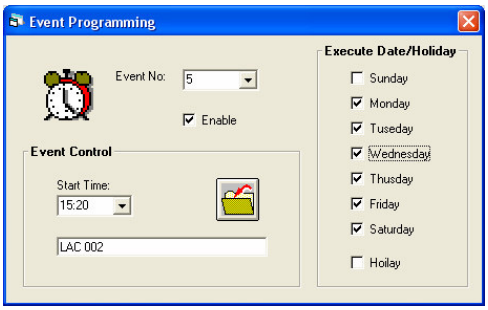
20. LAC xxx

This macro command is used to disable the access card reader. Disability will continue till withdrawal. Usually used with the RAC macro command in point 21 of this manual.

[Parameters]

xxx	Card access reader number or door number from 001 to 060

[Setup]



i. Look for [System Setup] in the menu bar, select [Time Events] icon located near to the bottom of the [System Setup] window.

ii. A window appears as shown on the left - Event Programming.

iii. Select the Event Number by the down arrow, example Event No. #5.

iv. Enter the Start Time that needs to execute the macro command.

v. At the execute macro command space provided; fill in the required macro command. For example, LAC 002

vi. Under execute Date/Holiday, choose the execution day or only execute on holiday.

vii. Remember to enable the event for execution when times up. For all settings done in Event Programming, click on the "save" icon to save the setup.

- After setup, if operator found out access card reader #2 icons on the map keeps flashing, this means that MEGASYS SYSTEM has executed the macro command LAC 002. Any card flash on the access card reader has no effect.

[Illustration and Explanation]

The operating hour for a company is 09:00 ~17:30. Normally, employees are allowed to work overtime till 22:00, and should leave the company after that. The security system in the company will activate from 22:00 till the next morning 08:00.

```
LAC 001
LAC 002
……
LAC 005
END
```

This macro command is normally exploit at the time to close the door (22:00), this is to facilitate overtime employees. Before the time reaches, all employees will have to leave the company. Or else, when time reaches 22:00 or later, none of the access card reader can function. Employee will not be able to go off until the next morning when the macro command RAC is used, then only the access card reader to back to operation.

This macro command written as LAC 001, LAC 002… LAC 005 will disable the access card reader #1, #2… #5. A proper setup is needed in order to give right correct execution.

```
RAC 001
RAC 002
……
RAC 005
END
```

This macro command is to eliminate the macro command LAC. This is used in the start working time (08:00). When employees are back to work, will not trigger any fault alarm. When the time reaches, all the access card reader will go back to normal operation, to read every card that flash across.

This macro command written as RAC 001, RAC 002… RAC 005 will enable back the access card reader #1, #2… #5. A proper setup is needed in order to give right correct execution.

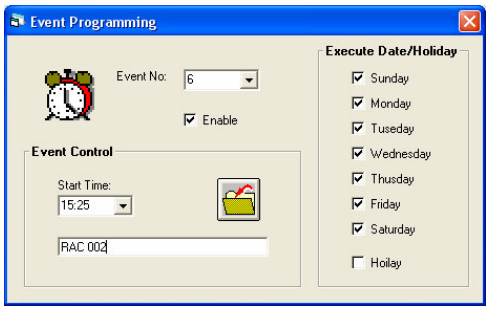
21. RAC xxx

This macro command is used to restore the status of the access card reader back to use or enable the readability of the access card reader.

[Parameters]

xxx	Card access reader number or door number from 001 to 060

[Setup]



i. Look for [System Setup] in the menu bar, select [Time Events] icon located near to the bottom of the [System Setup] window.

ii. A window appears as shown on the left - Event Programming.

iii. Select the Event Number by the down arrow, example Event No. #6.

iv. Enter the Start Time that needs to execute the macro command.

v. At the execute macro command space provided; fill in the required macro command. For example, RAC 002.

vi. Under execute Date/Holiday, choose the execution day or only execute on holiday.

vii. Remember to enable the event for execution when times up. For all settings done in Event Programming, click on the "save" icon to save the setup.

- After setup, operator found out access card reader #2 remains in disabled status. When MEGASYS SYSTEM executes the macro command RAC 002. Access card reader will continue to read any card that flashes across.

[Illustration and Explanation]

For this section, please refer to macro command point 20 of this manual.

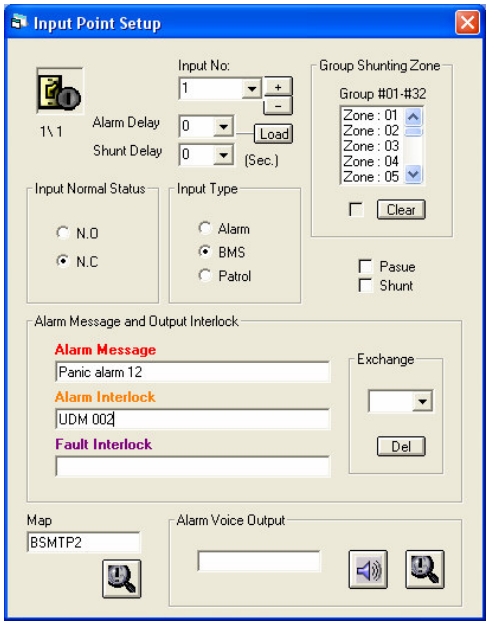
22. UDM xxx

This macro command is used to unlock the door momentary. Door will open for a few seconds before closing back again.

[Parameters]

xxx	Door that needs to open momentary

[Setup]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #1.

iv. Select the Input Type. For example: BMS

v. At the Alarm Message, fill in the name of the Alarm input point. For example Door Remote Open.

vi. At the Alarm Interlock, fill in the macro command. For example, UDM 002, meaning open door #2 temporary.

□ When Alarm Input #1 is being triggered, like a button is pressed, this Door #2 will open for a few second and then close back.

[Illustration and Explanation]

UDM 002

For instance, this macro command is implemented on a security system. Usually implemented in a residential building, and security control is looking at the main entrance. When there is high ranked security guard patrolling the area, who will not have any password, will required the guard at the control room to press the specific button to open up the door momentary.

Or, the tenant wanted to go out, when reaching the main entrance, will just need to press the button near the door to exit, will not need any password. This macro command UDM 002 comes in handy, but requires to pre-setup in the system.

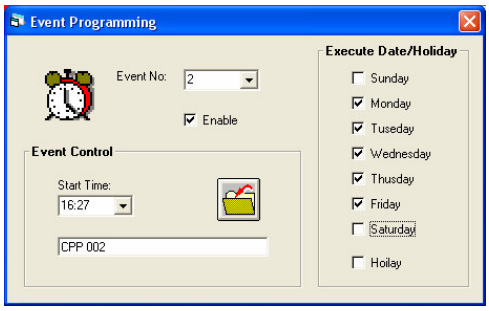
23. CPP xxx

This macro command is utilized such that the in order to access the door, flashing the card at the reader is not enough, accessing will require entering correct password.

[Parameters]

xxx	Card access reader number or door number from 001 to 060

[Setup]



i. Look for [System Setup] in the menu bar, select [Time Events] icon located near to the bottom of the [System Setup] window.

ii. A window appears as shown on the left - Event Programming.

iii. Select the Event Number by the down arrow, example Event No. #2.

iv. Enter the Start Time that needs to execute the macro command.

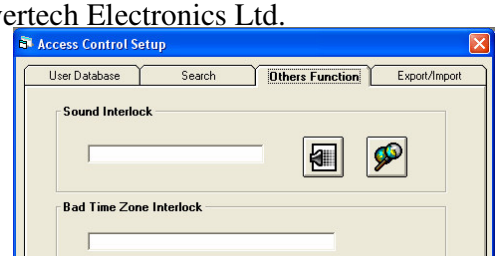
v. At the execute macro command space provided; fill in the required macro command. For example, CPP 002.

vi. Under execute Date/Holiday, choose the execution day or only execute on holiday.

vii. Remember to enable the event for execution when times up. For all settings done in Event Programming, click on the "save" icon to save the setup.

- When MEGASYS SYSTEM executes this macro command, access card reader #2 icons will keep flashing. Any accessing to access card reader #2 will have to flash the card, and follow by password.
- Operator will have to pre-define the card password at the user database setup.

i. Click on the [System Setup] icon and look and click on [Access Control Setup]



icon. Select the first icon which is the [User Database Setup].

ii. Select the 3rd window tab, [Others Function] and at the bottom of the window, look for [Keyboard Pin Code].

iii. The number shown is the password for the card. This password is auto-generated by MEGASYS SYSTEM which does not allow alteration.

[Illustration and Explanation]

CPP 002

For an instance, in a bank, there is a customer entering into the vault. Due to security reason, not everyone is allowed to enter. Therefore, when staff bring customer to the vault, this staff will have to flash the access card and follow by a password. Access is granted upon authorization.

This macro command, CPP 002 is written for this purpose and will take effect only upon pre-define in the MEGASYS SYSTEM.

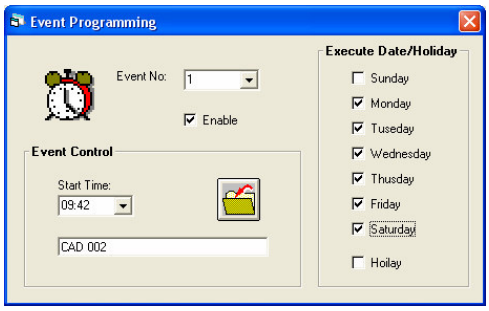
24. CAD xxx

This macro command is utilized such that any access will only require to flash card on the access card reader.

[Parameters]

xxx	Card access reader number or door number from 001 to 060

[Setup]



i. Look for [System Setup] in the menu bar, select [Time Events] icon located near to the bottom of the [System Setup] window.

ii. A window appears as shown on the left - Event Programming.

iii. Select the Event Number by the down arrow, example Event No. #1.

iv. Enter the Start Time that needs to execute the macro command.

v. At the execute macro command space provided; fill in the required macro command. For example, CAD 002.

vi. Under execute Date/Holiday, choose the execution day or only execute on holiday.

vii. Remember to enable the event for execution when times up. For all settings done in Event Programming, click on the "save" icon to save the setup.

 Reaching office operating hour 08:00, MEGASYS SYSTEM will carry out this macro command to change the behavior of card reader #2. This turns the reader which requires card and password into a reader which requires card only.

[Illustration and Explanation]

CAD 002

In an extremely high secure company (For example, bank), this macro command is being utilized. The rule of thumb is all employees during office hour accessing any place (except washrooms) will require flashing their access cards.

In this case, operator will need to setup at the MEGASYS SYSTEM using this macro command. Upon execution, all employees will only need to flash their access cards to enter/exit.

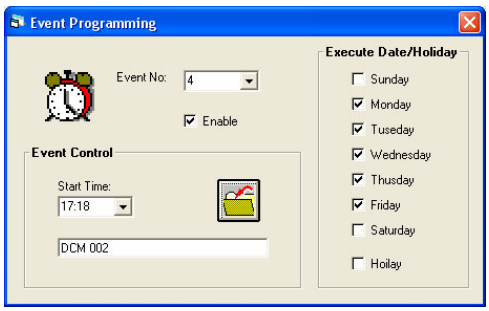
25. DCM xxx

This macro command is exploited using two access cards. This means that this reader will need two different access cards to flash across, upon authentication, and then allow accessing the door.

[Parameters]

xxx	Card access reader number or door number from 001 to 060

[Setup]



i. Look for [System Setup] in the menu bar, select [Time Events] icon located near to the bottom of the [System Setup] window.

ii. A window appears as shown on the left - Event Programming.

iii. Select the Event Number by the down arrow, example Event No. #4.

iv. Enter the Start Time that needs to execute the macro command.

v. At the execute macro command space provided; fill in the required macro command. For example, DCM 002.

vi. Under execute Date/Holiday, choose the execution day or only execute on holiday.

vii. Remember to enable the event for execution when times up. For all settings done in Event Programming, click on the "save" icon to save the setup.

 During execution, any access on access card reader #2 must use two cards. But when flashing the access card on the reader, the LED light will flash green and then turn to red, waiting for the next access card to flash. When time exceeded without flashing the second access card, there will be notification on the MEGASYS SYSTEM.

[Illustration and Explanation]

DCM 002

During operating hour, every employee will need to flash their access card across the access card reader, and will allow to enter upon authentication.

However, arrive at a particular time for example knock off time, in the MEGASYS SYSTEM setup using this characteristic start to execute this macro command. Any employee wish to enter into company after office hour or any premises will require two different access cards on the same access card reader. Upon authentication, access will then be granted. After office hour entering into company premises, needs two employees to go in, reason for supervision to prevent any mishap.

26. ESM xxx

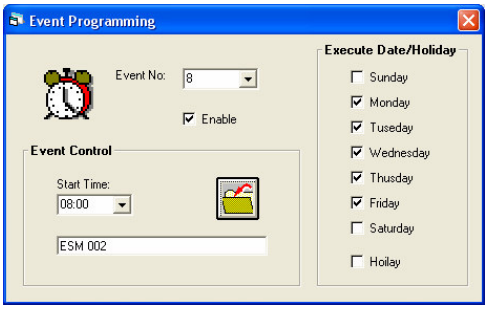
This macro command is used to ensure that two access card entry. Particularly, one of the access cards must be the master card containing the #13 Time Zone, together with a normal access card, in order to access.

This feature of this macro command is quite similar as compared to DCM in point 25 of this manual. The difference is that one of the access card used in ESM must be access card from manager or higher post whereas two access cards used in DCM require no specific level or it can be the same level card.

[Parameters]

xxx	Card access reader number or door number from 001 to 060

[Setup]



i. Look for [System Setup] in the menu bar, select [Time Events] icon located near to the bottom of the [System Setup] window.

ii. A window appears as shown on the left - Event Programming.

iii. Select the Event Number by the down arrow, example Event No. #8.

iv. Enter the Start Time that needs to execute the macro command.

v. At the execute macro command space provided; fill in the required macro command. For example, ESM 002.

vi. Under execute Date/Holiday, choose the execution day or only execute on holiday.

vii. Remember to enable the event for execution when times up. For all settings done in Event Programming, click on the "save" icon to save the setup.

- The ways to setup access control information, please refers to the MEGASYS SYSTEM Programming Manual Version 2.0, Chapter 8 (Patrol Tour)
- The ways to setup access time zone and access level, please refers to the MEGASYS SYSTEM Programming Manual Version 2.0, Chapter 8 (Patrol Tour)

- The Master Access Card will need to setup the access card reader #2. In [Access Level Setup], under the Door #2 entered #13 in order to utilize this macro command. (Refer to the table 26-1. Value 1 as the normal access user, and Value 2 as the master access user.)

Access Level	Door Description			
	Door 1	Door 2	Door 3	Door4
No.: 1	1	1	0	1
No.: 2	13	13	0	13

Table 26-1 Access Level Setup Table

[Illustration and Explanation]

ESM 002

For an instance, this macro command is used in a bank system. In a particular area, in order to grant access, it requires manager (holding master access card) to follow. First, flash the Master Access Card, and follow by a normal user access card. The reason is this particular area might contain confidential document or high-valued items, and not everyone can access at ease. In this case, the security in this area increases.

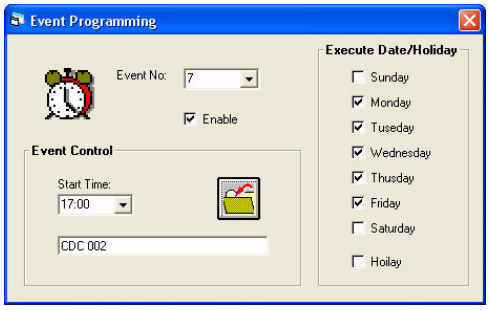
27. CDC xxx

This macro command is used to remove the feature DCM using two access card. This removes the initial setup of DCM xxx feature implementing in the MEGASYS SYSTEM, and will not need to use two access cards to grant entry.

[Parameters]

xxx	Card access reader number or door number from 001 to 060

[Setup]



i. Look for [System Setup] in the menu bar, select [Time Events] icon located near to the bottom of the [System Setup] window.

ii. A window appears as shown on the left - Event Programming.

iii. Select the Event Number by the down arrow, example Event No. #7.

iv. Enter the Start Time that needs to execute the macro command.

v. At the execute macro command space provided; fill in the required macro command. For example, CDC 002.

vi. Under execute Date/Holiday, choose the execution day or only execute on holiday.

vii. Remember to enable the event for execution when times up. For all settings done in Event Programming, click on the "save" icon to save the setup.

[Illustration and Explanation]

CDC 002

For an instance, the working time starts at 09:30; MEGASYS SYSTEM will automatically perform the macro command. The two access card features in Door #2 or the access card reader which previously setup will be discarded. All employees just require flashing their own access card to grant access.

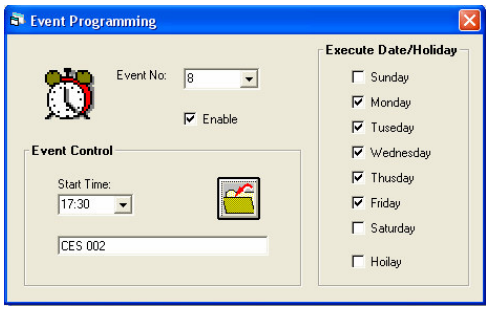
28. CES xxx

This macro command is used to remove the feature ESM using two access card. This removes the initial setup of ESM xxx feature implementing in the MEGASYS SYSTEM, and will not need to use two access cards to grant entry.

[Parameters]

xxx	Card access reader number or door number from 001 to 060

[Setup]



i. Look for [System Setup] in the menu bar, select [Time Events] icon located near to the bottom of the [System Setup] window.

ii. A window appears as shown on the left - Event Programming.

iii. Select the Event Number by the down arrow, example Event No. #8.

iv. Enter the Start Time that needs to execute the macro command.

v. At the execute macro command space provided; fill in the required macro command. For example, CES 002.

vi. Under execute Date/Holiday, choose the execution day or only execute on holiday.

vii. Remember to enable the event for execution when times up. For all settings done in Event Programming, click on the "save" icon to save the setup.

[Illustration and Explanation]

```
        CES 002
        LKD 002
END
```

For an instance, certain area in the bank, after office hour, no one is allowed to enter in this premise (including the master access card holder). Operator will need to pre-setup in the [Time Events]. The macro command will be performed when time reaches. First, remove the initial setup ESM features using two access cards (CES 002) and follow by locking up the door (LKD 002).

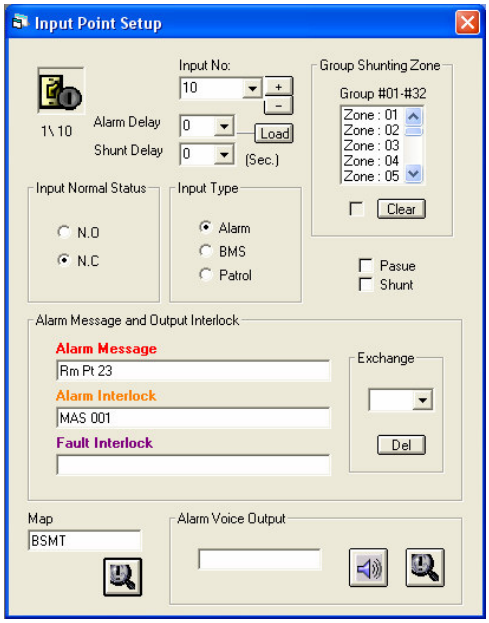
29. MAS xxx

This macro command used to activate the specific output port that is installed in the main MEGASYS SYSTEM.

[Parameters]

xxx	Output ports from 001 to 008 in main MEGASYS SYSTEM

[Setup]



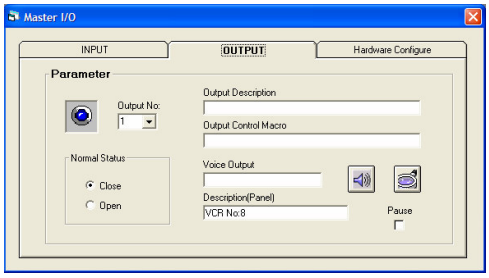
i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #10.

iv. Select the Input Type. For example: Alarm

v. At the Alarm Interlock, fill in the macro command. For example, MAS 001.



i. Click on [System Setup]. Select the next icon [System Setup] and follow by 8th icon, [Master I/O control].

ii. A window appears as shown on the left, Master I/O.

iii. Select the second tab, Output and setup the selected output. For example Output #1.

iv. At the Description (Panel), fill in the description of the device connect to this output port. For example, VCR No: 8.

- When there is an output signal sends and needs to play any audio, just fill in the name of the audio file under the Voice Output. For example, alarm1.

[Illustration and Explanation]

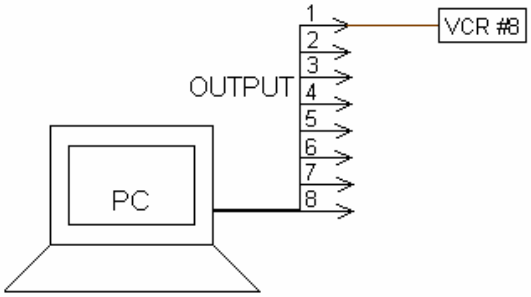


Figure 1 Output port of MEGASYS SYSTEM connect to VCR

MAS 001

In a specific company, Alarm Input #10 is being triggered; MEGASYS SYSTEM executes the macro command under the alarm interlock. Immediately, the output port #1 on the MEGASYS SYSTEM connected to VCR #8 is triggered to record the happening. (Refer to figure 2.)

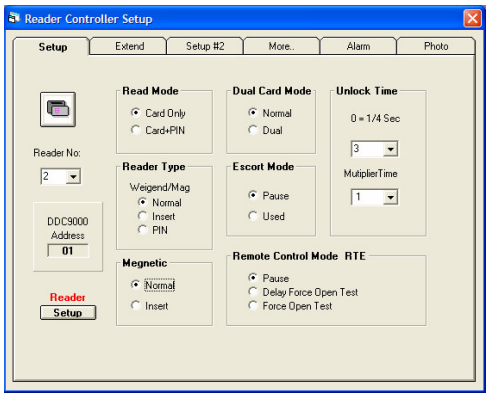
30. STG xxxx

This macro command is used to toggle the status of a specific alarm input point.

[Parameters]

xxxx	Alarm input points from 0001 to 2048

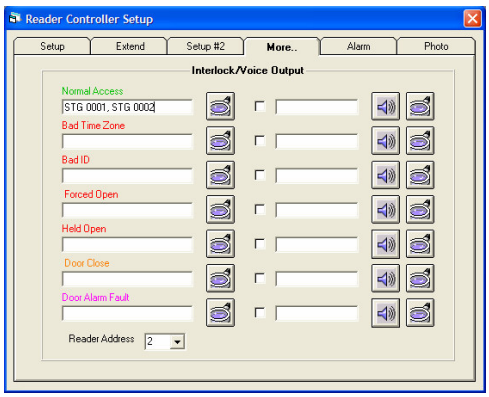
[Setup]



i. Click on the [System Setup] icon and look and click on [Access Control Setup] icon. Next select the sixth icon which is the [Card Reader Setup].

ii. A window appears as shown on the left, Reader Controller Setup with total of 6 tab windows.

iii. At the first tab that is the setup, select the address of the card reader. For example, reader #2.



iv. Select the tab number 4 which show More setup

v. Fill in the macro command under first interlock, Normal Access. For example, STG 0001, STG 0002, STG 0003, ACU 001 OTG 005.

vi. This completes the setup.

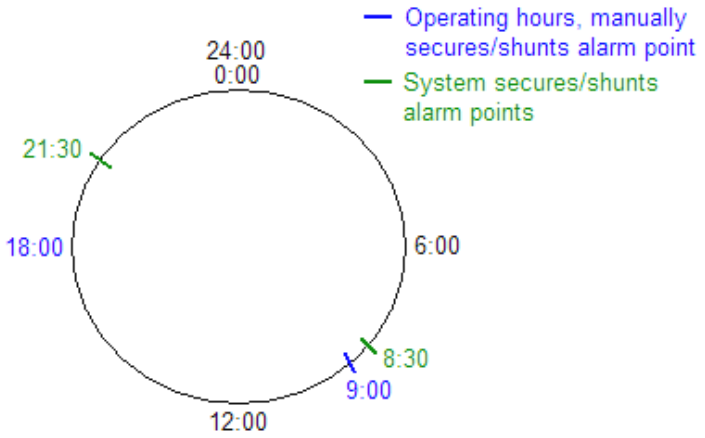


Figure 30-1 Time in executing command around the clock

[Illustration and Explanation]

STG 0001
STG 0002
STG 0003
ACU 001 OTG 005
END

For an instance, in a company the operating hours is 09:00 ~ 18:00. In the company, some alarm points are installed. During office hours, all alarm point will need to put to shunt and after office hour, will have to put into secure so as to resume operation.

Normally, an access card is used to control the alarm point to put into shunt or secure mode. This access card requires predefining in the setup and specially catering a special door zone. For example, door #5. Additional, operator will need to setup the card access reader. Refer to the [Card Reader Setup].

After finishing the setup, the person who possesses this access card before entering into the company, requires to flash the access card across the card access reader. All the alarm point in the company will put to shunt. In this case, during office hour, there will not be any false alarm happening. Before knocking off time reaches, this access card will be given to the last person leaving the company. When the last person leaves the place, the access card must be flashed across the card access reader #5 to resume the operation of all alarm points (secure).

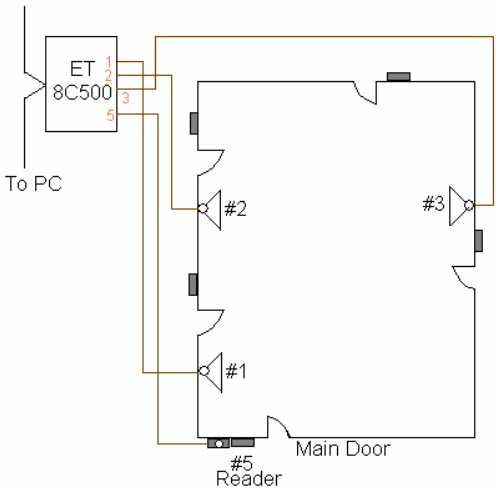


Figure 30-2 Status of Alarm point control by card access reader

- *This access card is only meant for shunting and securing the function of alarm input point.*
- *This access card can either based on time limit or time unlimited. If it is time limited, will just need to pre-setup at the time zone.*

Note: In real situation, there will be two groups, shunting or securing alarm input point setup. Above example is one of them, next will explain the second.

The time event group is programmed in such a way that when times up, MEGASYS SYSTEM will automatically execute commands. For example, this group is pre-setup in the following format:

1) *Execution time is every Monday till Friday*
2) *Event #1 will be programmed to execute at 08:30*
3) *Event #2 will be programmed to execute at 21:30*
4) *In Event #1, the following macro command is executed, SHM 0001, SHM 0002…*
5) *In Event #2, the following macro command is executed, SHO 0001, SHO 0002…*

After setting the above format in MEGASYS SYSTEM, when the time comes to Monday till Friday from 08:30, MEGASYS SYSTEM will automatically execute the macro command in event #1. The execution will hold all the alarm input points to shunt mode. When time reaches 21:30, MEGASYS SYSTEM will automatically execute the macro command in event #2 which put all the alarm input points to secure mode.

- *For detail on SHM xxxx, please refer to this manual on macro command point 46 (Page 72).*
- *For detail on SHO xxxx, please refer to this manual on macro command point 19(Page 32).*

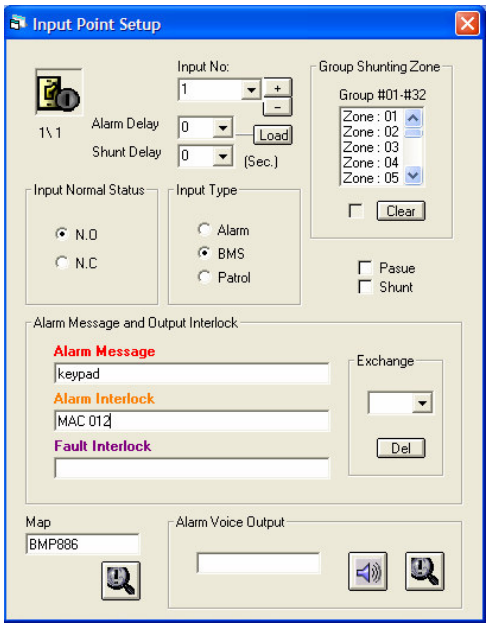
31. ACU yyy OUF xxx

This macro command is used to force a particular alarm output point on the ET Alarm Controller to OFF. When that particular alarm output point is ON, when executing this macro command, the alarm output point will be forced to OFF.

[Parameters]

yyy	Alarm controller address 001 to 255.
xxx	Output point of the alarm controller.

[Setup]



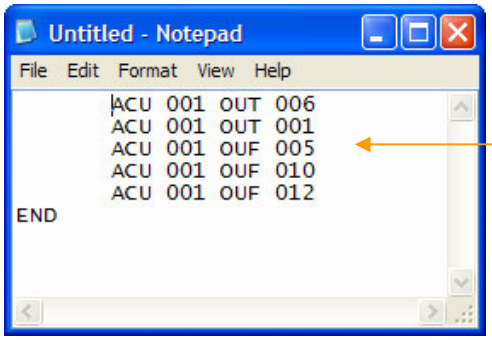
i. Click on [System Setup] on the menu bar, choose [Input Setup] and then under the first icon, select [Input Setup].

ii. A window appears as shown on the left - Input Point Setup.

iii. Select the Input Number, example Input #1.

iv. Choose the input type, example, BMS.

v. At the Alarm Interlock, fill in the macro command as "MAC 012".



File MACRO 012

[Illustration and Explanation]

ACU 001 OUT 006
ACU 001 OUT 001
ACU 001 OUF 005
ACU 001 OUF 010
ACU 001 OUF 012
} MAC012.PRG
END

If the above macro command script is written for patrolling a major building, when patrol guard reaches 4th floor, key switch #1 is turned on, the LED for this output point will light up. To prevent the other output LED to light up, included these macro command to make it work effectively.

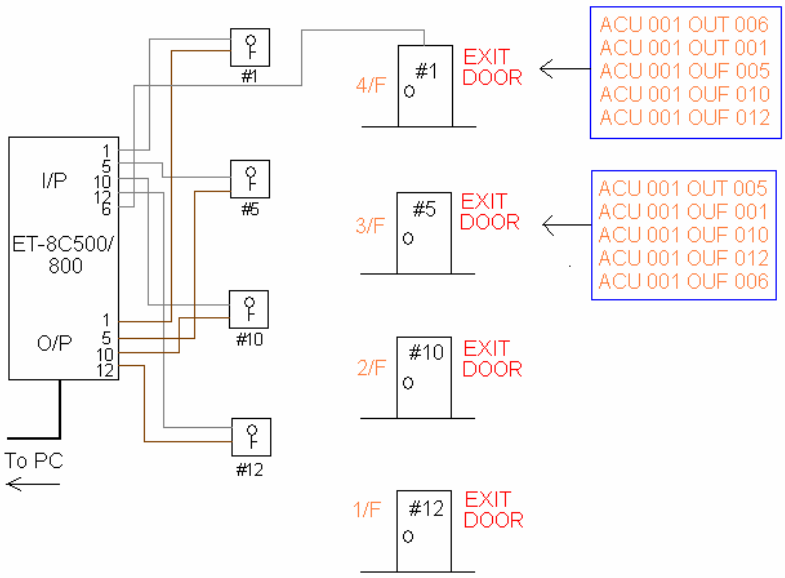


Figure 31-1 Illustration in Patrolling using OUF Command

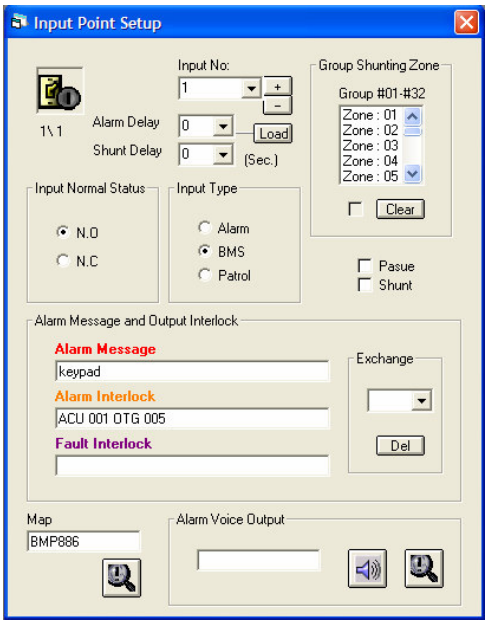
32. ACU yyy OTG xxx

This macro command is utilized to toggle the status of a particular alarm output point of the ET Alarm Controller. If that particular alarm output point is lighted up (ON), upon executing this macro command, the LED will turn off (OFF).

[Parameters]

yyy	Alarm controller address 001 to 255.
xxx	Output point of the alarm controller.

[Setup]



i. Click on [System Setup] on the menu bar, choose [Input Setup] and then under the first icon, select [Input Setup].

ii. A window appears as shown on the left - Input Point Setup.

iii. Select the Input Number, example Input #1.

iv. Choose the input type, example, Alarm.

v. At the Alarm Interlock, fill in the macro command as "ACU 001 OTG 005".

[Illustration and Explanation]

As soon as an alarm input point is triggered, it activates the Alarm System. During the execution, MEGASYS SYSTEM will toggle the current state of the alarm output point. If the alarm output point is in the OFF mode, after alarm is being triggered, MEGASYS SYSTEM will execute this macro command, and the alarm output will toggle to ON mode and vice versa.

ACU 001 OTG 005

When MEGASYS SYSTEM executes this macro command, it will turn ON the LED on the ET Alarm Controller for alarm output point #5 if the previous status is OFF, and vice versa.

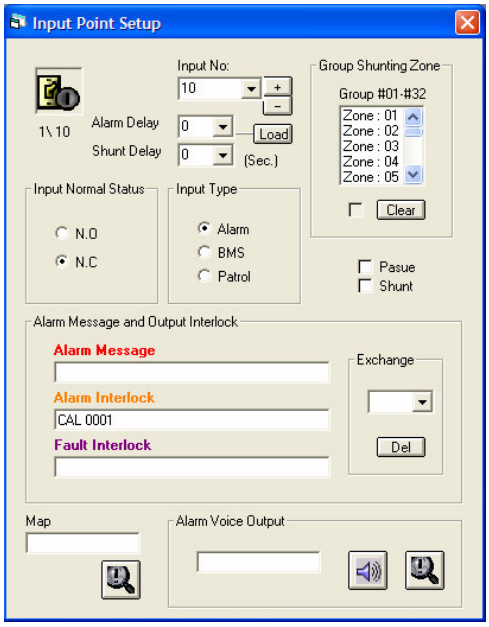
33. CAL xxxx

This macro command is used to activate the device that is connected to the output relay of the ET alarm controller for communication between the command centre and the site.

[Parameters]

xxxx	Alarm input points from 0001 to 2048

[Setup]



i. Click on [System Setup] on the menu bar, choose [Input Setup] and then under the first icon, select [Input Setup].

ii. A window appears as shown on the left - Input Point Setup.

iii. Select the Input Number, example Input #10.

iv. Choose the input type, example, Alarm.

v. At the Alarm Interlock, fill in the macro command as "CAL 0001".

[Illustration and Explanation]

CAL 0001

In a building, alarm input point #10 is being activated, when ET-8C500/ET-8C800 alarm controller received this signal, this signal is transmitted back to the MEGASYS SYSTEM. MEGASYS SYSTEM will execute the macro command under the alarm interlock of alarm input point #10 accordingly.

For instance, MEGASYS SYSTEM and the ET-8C500/ET-8C800 alarm controller has connected to a microphone separately, when executing the macro command, MEGASYS SYSTEM will turn on that specific output relay at the ET-8C500/ET-8C800 alarm controller. At this time, the operator will be able to make use of the

microphone at the MEGASYS SYSTEM to speak to the party at the site who is making use of the microphone too.

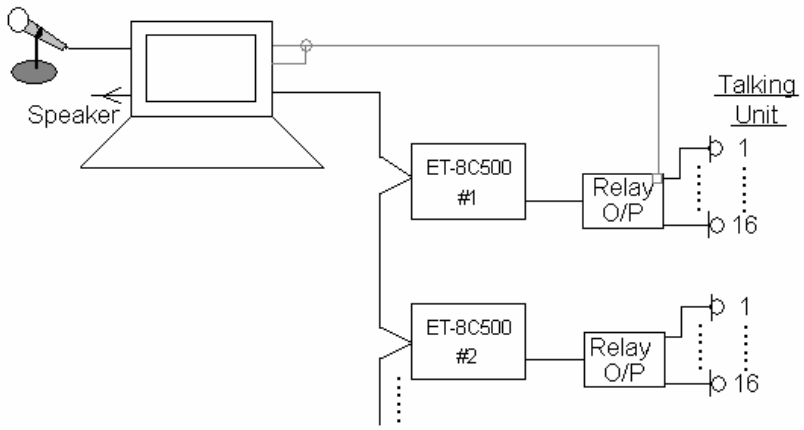


Figure 33-1 Communication using microphone at command centre and site

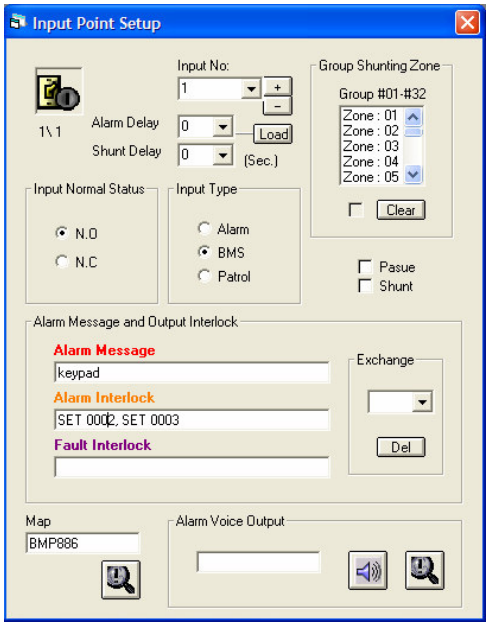
34. SET xxxx

This macro command is used to turn ON other related alarm input points.

[Parameters]

xxxx	Alarm input points from 0001 to 2048

[Setup]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #1.

iv. Select the Input Type. For example: Alarm.

v. At the Alarm Interlock, fill in the macro command. For example, SET 0002, SET 0003.

- *When alarm input point #1 is being activated, at the same time, alarm input point #2 and #3 will be turn ON. Operator could see icons representing alarm input point #1, #2 and #3 will be flashing (flashing red) at the same time.*

[Illustration and Explanation]

SET 0002, SET 0003

For example, this macro command is used in a particular hotel. In this hotel, every storey has an exit door and each has an alarm input point installed. Refer to figure 34-1.

On the second floor, the door contact as the alarm input point #2 connected to the RPU #8. When the exit door is being open, RPU #8 received the signal; MEGASYS SYSTEM will turn ON the alarm output point #2 on RPU #8. This alarm output point #2 is to turn on the siren or lighting, at the same time, activate the alarm point of other floors, executing respective macro commands, and also activate the nearest camera to the right position to capture the scene. Refer to Table 34-1.

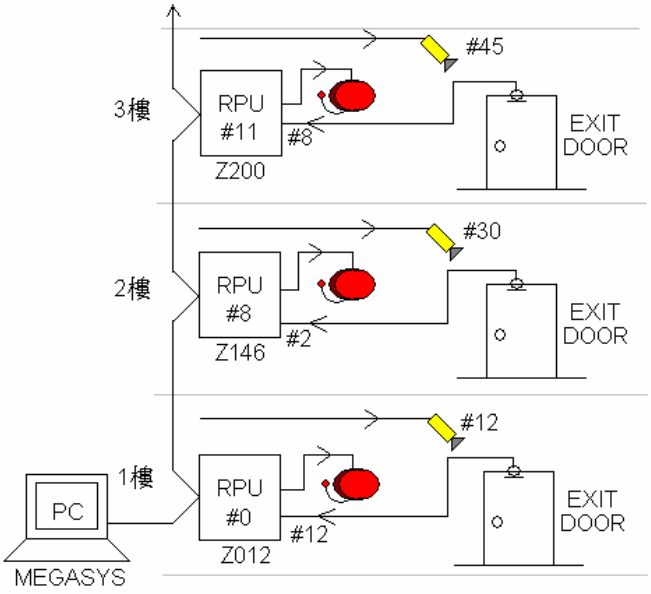


Figure 34-1 Connection to the ET-8C500/ET-8C800 in the hotel

Zone No.	Macro
Zone 200	ACU 012 OUT 008
(RPU 012 IN 008)	CAM 045 POS 009
	SET 146
Zone 146	ACU 008 OUT 002
(RPU 008 IN 002)	CAM 030 POS 005
	SET 200
	SET 012
Zone 012	ACU 001 OUT 012
(RPU 001 IN 012)	CAM 012 POS 001
	SET 146

Table 34-1 Macro command to be executed for different zone

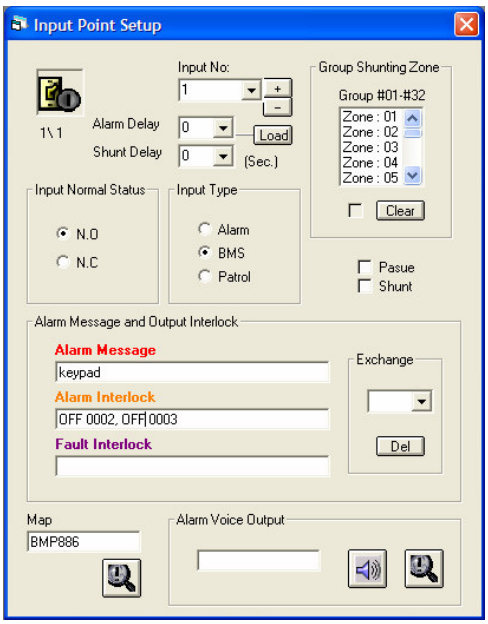
35. OFF xxxx

This macro command is very similar to macro command point 34. When there is alarm activation, this macro command is utilized to turn OFF other alarm input points.

[Parameters]

xxxx	Alarm input points from 0001 to 2048

[Setup]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #1.

iv. Select the Input Type. For example: BMS.

v. At the Alarm Interlock, fill in the macro command. For example, OFF 0002, OFF 0003.

□ *When alarm input point #1 is being triggered, originally alarm input #2 and #3 will be activated. But by using this macro command, alarm input #2 and #3 will be temporary turn OFF executing macro command.*

[Illustration and Explanation]

No illustration for this macro command.

36. PANEL xxxx

This macro command is used to control the specific LED on the Display Panel to light ON or OFF. Immediately when an alarm input point is triggered, MEGASYS SYSTEM will execute the macro command of this input point. Signal will be sent to ET-Panel and the representing LED will light up.

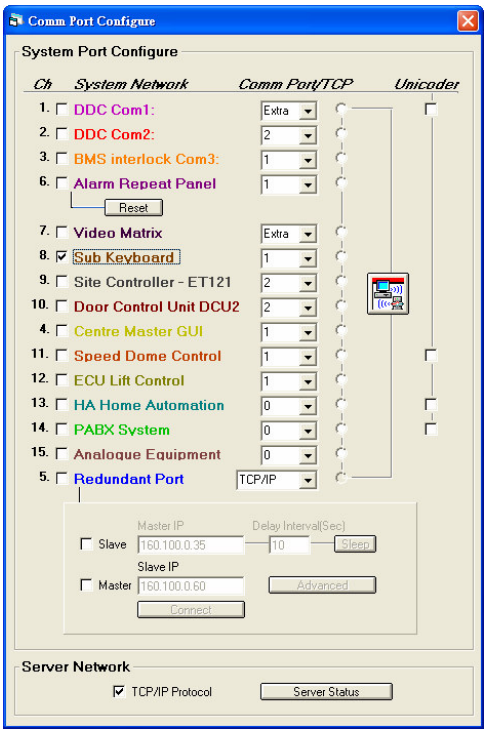
[Parameters]

xxxx	ET-Panel output point from 0001 to 2048

[Setup]

Before using the macro command or using this method to show the alert, system must be pre-setup.

⌦ System Communication



i. Click on the [System Setup] icon. Look and click on [System Communication] icon.

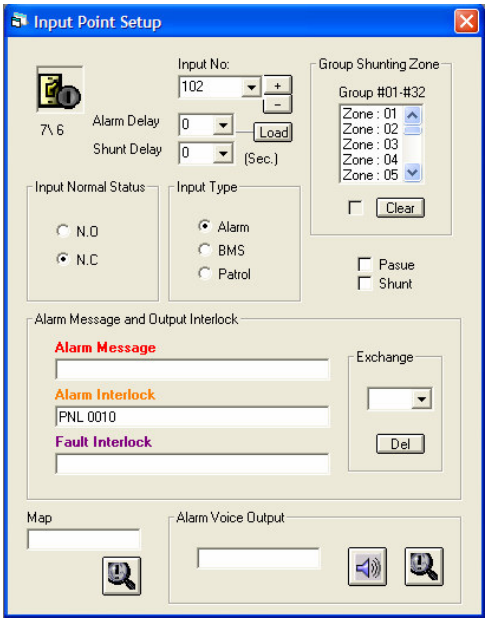
ii. A window appears as shown on the left, Comm. Port Configure.

iii. Select the ch 8 for the Sub Keyboard. Check the checkbox beside it.

iv. Under the same item chosen, choose the right communication port channel by clicking the arrow to give the drop down list.

⌦ Setup input point

i. Click on the [System Setup] icon and look and click on [Input Setup] icon.



iii. Select the first icon which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #102.

iv. Select the Input Type. For example: Alarm.

v. At the Alarm Interlock, fill in the macro command. For example, PANEL 0010.

[Illustration and Explanation]

Every time when there is alarm input point being triggered, all the signal and information will be shown on MEGASYS SYSTEM. But some people might not prefer to present it on the graphical format, but present it on the Display Panel.

PANEL 0010

For instance, alarm input point #102 is set off, and through ET-8C500/ET-8C800 sending the signal back to MEGASYS SYSTEM. MEGASYS SYSTEM will execute the macro command under the alarm interlock of alarm input point #102. Using channel 4, the signal is send to the output point #10 of ET-Panel which turn on the LED on the Display Panel.

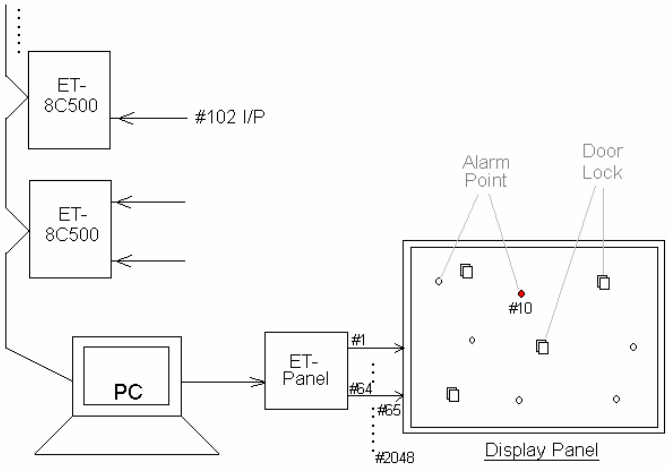


Figure 36-1 Interfaces to ET-Panel

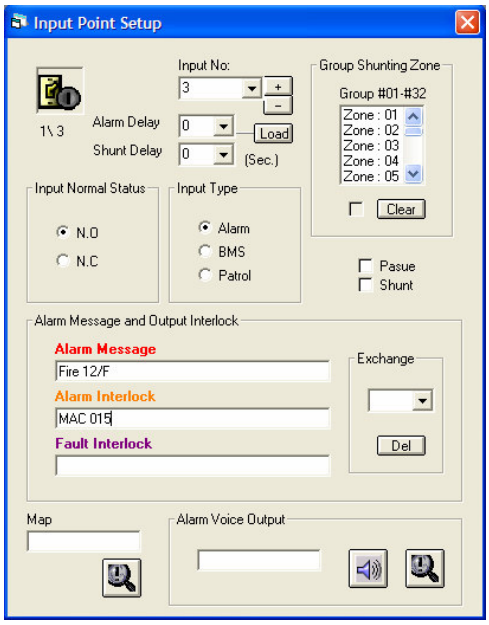
37. ALA xxx

This macro command is used to set the alarm alert at the MEGASYS SYSTEM to turn ON or OFF.

[Parameters]

xxx = 000	Turn off alarm alert
xxx = 001	Turn on alarm alert

[Setup]



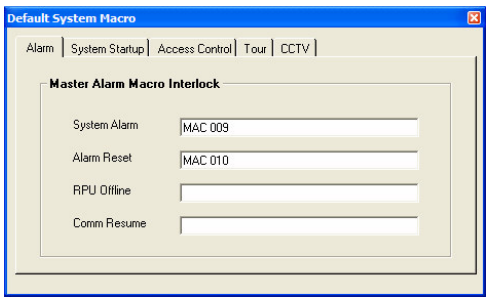
i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #3.

iv. Select the Input Type. For example: Alarm.

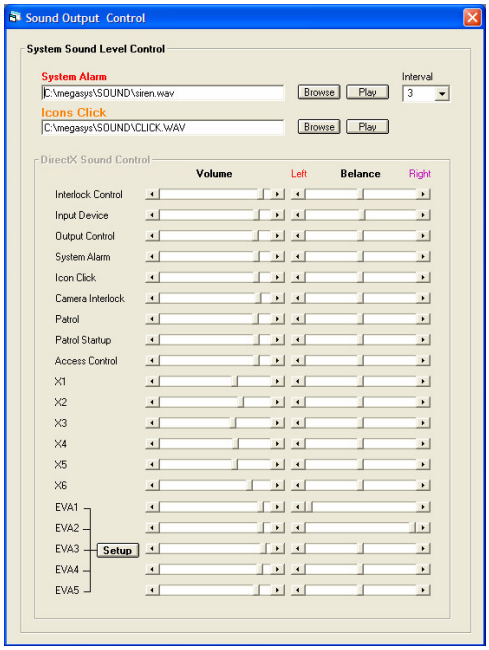
v. At the Alarm Interlock, fill in the macro command.



i. Click [System Setup] on the menu bar, look for [System Setup], then click on the 9th icon [Master Interlock].

ii. A window shown up on the left – Default System Macro.

iii. Fill in the necessary macro script or command for the space provided for System Alarm and Alarm Reset.



i. Click [System Setup] on the menu bar, look for [System Setup], then click on the 4th icon [System Sound Control].

ii. A window shown up on the left – Sound Output Control.

iii. Under each categories of sound played, will just need to adjust the volume and balance to have better sound effect.

[Illustration and Explanation]

For instance alarm input point #10 is set off; the macro command under alarm interlock will be executed. However, if the macro command is referring to a macro script, for example, MAC 011, MEGASYS SYSTEM will stop playing the audio and will just execute the macro command in the macro script.

Nevertheless, during executing the macro script, MEGASYS SYSTEM can play audio. Operator can just add a macro command ALA 001 in the macro script. When executing the macro command, the audio is open up in the MEGASYS SYSTEM.

ALA 001

When executing this macro command, MEGASYS SYSTEM will execute the macro command at System Alarm under the Master Interlock. At the same time, all the different type of audio and the file will be open. When the audio file is opened, in an interval of 3 sec, the file is being played once.

ALA 000

When executing this macro command, MEGASYS SYSTEM executes the macro command at Alarm Reset under the Master Interlock and turns OFF all the audio broadcasting and the audio file.

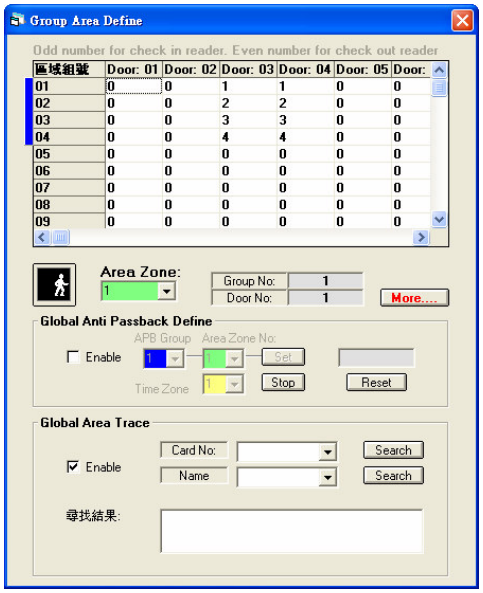
38. IAZ xxx

This macro command is applied when people entering certain zone, despite the number of people increase at this zone, at the same time also increase the counter at other zone. Normally, this macro command is used together with the DAZ (in point 39) macro command.

[Parameters]

xxx	Access Zone or level from 001 to 128

[Setup]



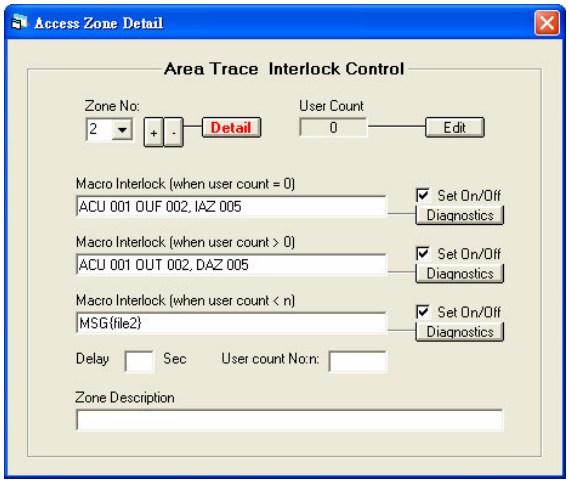
i. Click [System Setup] on the menu bar, look for [Access Control Setup], then click on the 11th icon [Access Zone Setup].

ii. A window shown up on the left – Group Area Define.

iii. Define the Area Zone to setup the access zone.

iv. Click on the 'More' button

v. Another window as show on below - the Access Zone Detail.



[Illustration and Explanation]

For example there is an area which is divided into 4 zones as shown in Figure 38-1. Every zone there are 2 alarm input point installed and a ON/OFF light bulb.

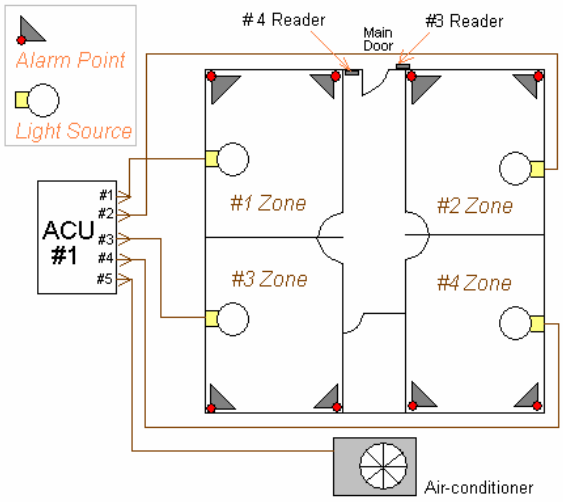
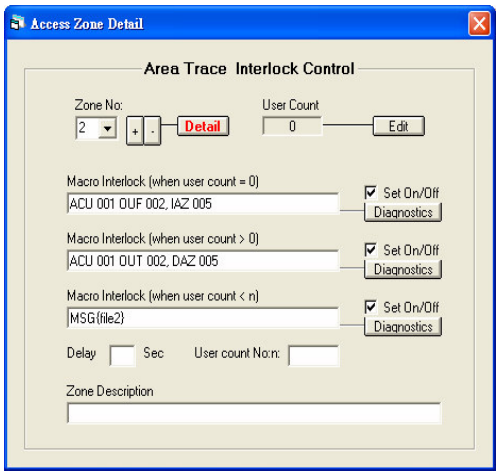
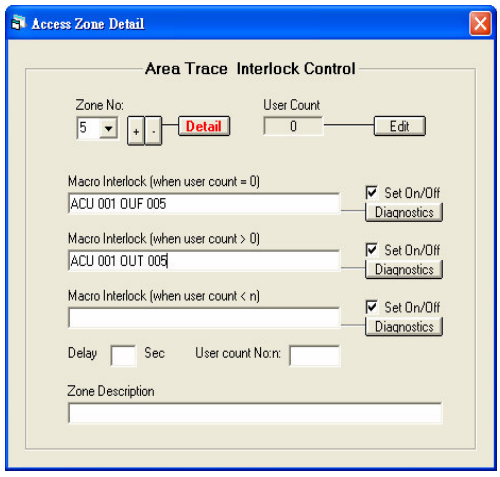


Figure 38-1 Area divided into 4 zones (IAZ xxx)

- *Macro command setup for each zone, please refer to Table 38-1.*





Zone 2: (>0) ACU 001 OUT 002, IAZ 005
Zone 5: (>0) ACU 001 OUT 005

When the first person access card reader #3 to enter to zone #2, the counter for zone #2 will increment by 1 (User Counter > 0). The alarm input point #6 and $7 will be in shunt state. The light of zone #2 will turn ON. The User Counter in Zone #5 will increase by 1, and at the same time, the air-conditioner will be turn ON. When other people accessing the same zone again, there will be no effect on the alarm input points and the lighting status.

- Any person using the access card reader #3 again and enter into the other zone, #1, #3, #4 will also execute the same command like zone #2, and also the zone #5 user counter will also increment by 1 (when people enter into the area).

Zone 2: (=0) ACU 001 OUF 002, DAZ 005

When the last person making use of access card reader #4 leaving zone #2, counter for zone #2 reduces to 0 (User Counter = 0), alarm input point #6 and 7 will resume back to secure state. The light for zone #2 will be turned OFF. The User Counter for zone #5 will be reduced to 0 too.

Zone 5: (=0) ACU 001 OUF 005

When User Counter for zone #5 is reduced to 0 (User Counter = 0), this imply that there is no one in that area. In this case, MEGASYS SYSTEM will execute the macro command in zone #5 (where User Counter = 0), and turn OFF the air-conditioner.

Zone No.	Condition	Macro Interlock
1	User Count = 0	ACU 001 OUF 001, DAZ 005
	User Count > 0	ACU 001 OUT 001, IAZ 005
2	User Count = 0	ACU 001 OUF 002, DAZ 005
	User Count > 0	ACU 001 OUT 002, IAZ 005
3	User Count = 0	ACU 001 OUF 003, DAZ 005
	User Count > 0	ACU 001 OUT 003, IAZ 005
4	User Count = 0	ACU 001 OUF 004, DAZ 005
	User Count > 0	ACU 001 OUT 004, IAZ 005
5	User Count = 0	ACU 001 OUF 005
	User Count > 0	ACU 001 OUT 005

Table 38-1 Zone command allocation (IAZ xxx)

39. DAZ xxx

This macro command is applied when people leaving certain zone, despite the number of people reduce at this zone, at the same time also decrease counter at other zone. Normally, this macro command is used together with the IAZ (in point 38) macro command.

[Parameters]

xxx	Access Zone or level from 001 to 128

[Setup]

Setting up for this macro command, please refer to macro command point 38.

[Illustration and Explanation]

Example for this macro command, please refer to macro command point 38.

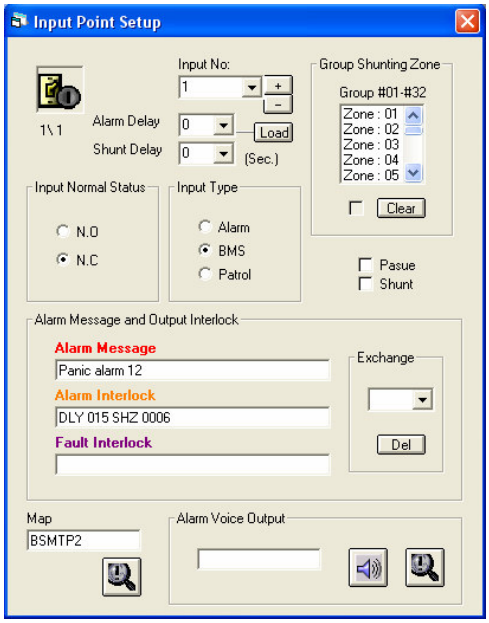
40. DLY yyy SHZ xxxx

This macro command is used to make a particular alarm input point to bypass/shunt temporary for period of time. This macro command is used on the software, making the particular alarm input point to bypass/shunt.

[Parameters]

yyy	Time in term of seconds
xxxx	Output point of the alarm controller from 0001 to 2048

[Setup]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #1.

iv. Select the Input Type. For example: BMS.

v. At the Alarm Interlock, fill in the macro command. For example, DLY 015 SHZ 0006.

[Illustration and Explanation]

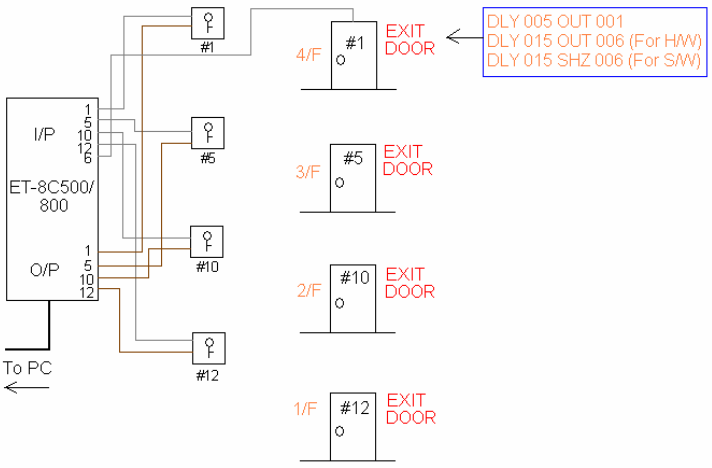


Figure 40-1 DLY yyy SHZ xxx drawing diagram for illustration

DLY 005 OUT 0001
DLY 015 SHZ 0006

END

Whenever the patrol guard reaches key switch #1, the MEGASYS SYSTEM will start to execute the specific macro command. Example DLY 015 SHZ 0006, immediately input point #6 connected to the door will temporary shunt or stop giving out any signal for 15 seconds. The patrol guard will be able to go through door #1 and proceed to the next destination, and will not trigger any alarm. Please refer to figure 40-1 above.

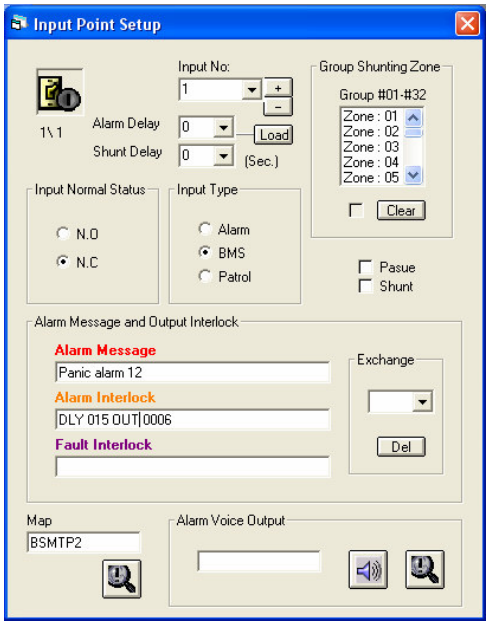
41. DLY yyy OUT xxxx

This macro command is used to set up specific output point to bypass/shunt temporary for period of time. Basically, this macro command controls the hardware output point to temporary shunt/stop giving out signal.

[Parameters]

yyy	Time in term of seconds
xxxx	Output point of the alarm controller from 0001 to 2048

[Setup]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #1.

iv. Select the Input Type. For example: BMS.

v. At the Alarm Interlock, fill in the macro command. For example, DLY 015 OUT 0006.

[Illustration and Explanation]

Whenever the patrol guard reaches key switch #1, the MEGASYS SYSTEM will start to execute the specific macro command. Example, DLY 015 OUT 0006 which is quite similar to macro command DLY 015 SHZ 0006. But the difference is this macro command DLY 015 OUT 0006 is changing the state on the hardware. Please refer to figure 41-1.

DLY 015 OUT 0001
DLY 015 OUT 0006

END

Under normal operation, if someone forces open the door, the door contact input point #1 will be opened, this will trigger an alarm. However, when patrol guard reaches the key switch, this macro command will change the state of the output point on the hardware. The status of the door contact input point #1 will remains in close state for 15 seconds. During this duration, opening the door will not trigger any alarm. After 15 seconds, alarm will be triggered if the door is being pushed open.

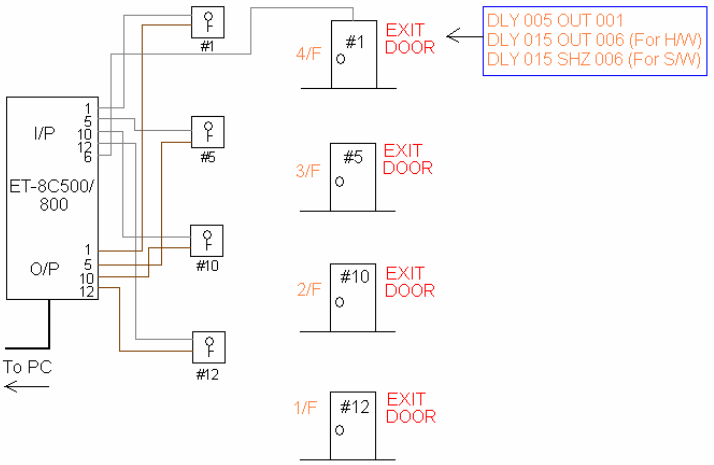


Figure 41-1 DLY yyy OUT xxx drawing diagram for illustration

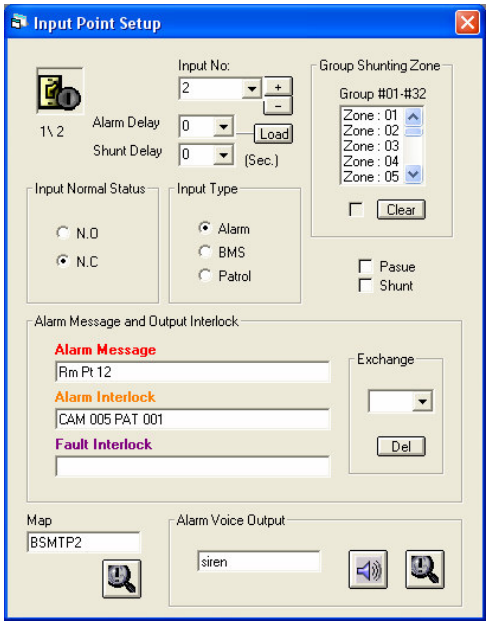
42. CAM xxx PAT yyy

This macro command is used to move the PTZ camera to specific preset location for capturing. All the settings must be pre-determined on Pelco D-type PTZ cameras.

[Parameters]

xxx	Camera number from 001 to 640
yyy	Preset position on the PTZ camera

[Setup]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon which is the [Input Setup].

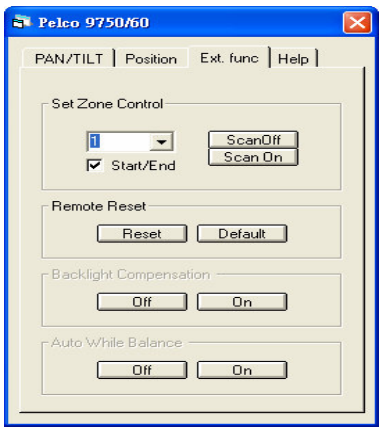
ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #2.

iv. Select the Input Type. For example: Alarm.

v. At the Alarm Interlock, fill in the macro command. For example, CAM 005 PAT 001.

Note: <Pelco D-Type Setup>

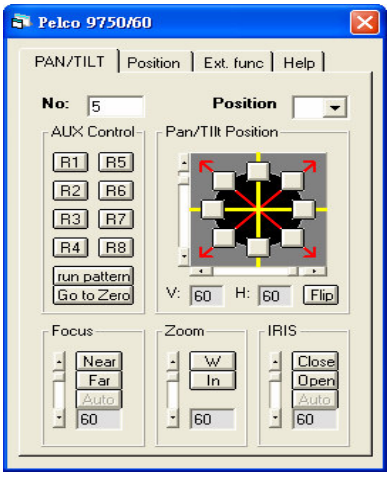


i. Activate the Pelco D-type PTZ Camera.

ii. A window appears as shown on the left, Pelco 9750/60.

iii. Select the 3rd tab, Ext. func.

iv. Under the first frame, Set Zone Control, press down arrow key to select the preset number.



v. Select the 1st tab, PAN/TILT

vi. Under the PAN/TILT position, bring the camera to move to the designated location for the first round.

[Illustration and Explanation]

CAM 005 PAT 001

This macro command is usually used in alarm. For instance, the alarm input point #2 is being triggered in a particular building; MEGASYS SYSTEM will execute the macro command in the alarm interlock. Immediately, MEGASYS SYSTEM command the PTZ camera #5 to move to preset position #1 to carry out capturing until alarm input point #2 resume back to normal.

For PTZ camera #5 in preset position #1, please refer to figure 42-1.

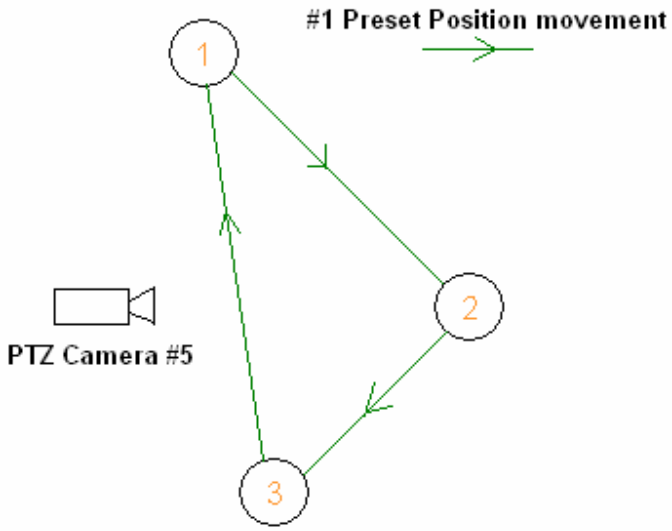


Figure 42-1 Picture Demo for CAM xxx PAT yyy

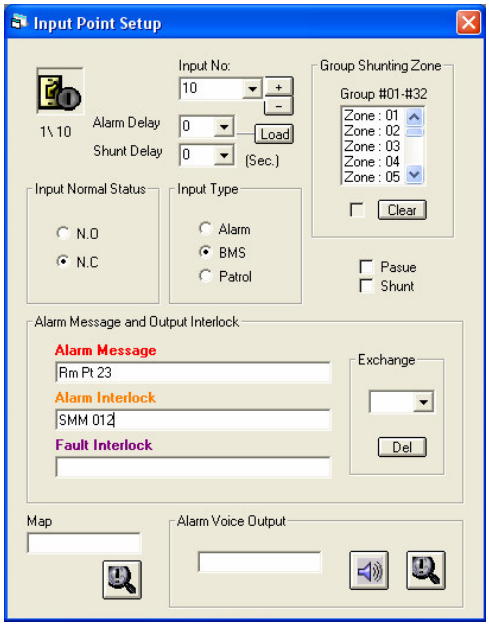
43. SMM xxx

This macro command is suitable to use in PELCO system. The usage is quite similar to the macro command, MAC xxx. This macro is used in PELCO system and also similarly used in MEGASYS SYSTEM.

[Parameters]

xxx	Number assigned to command setup in PELCO system

[Setup]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #10.

iv. Select the Input Type. For example: BMS.

v. At the Alarm Interlock, fill in the macro command. For example, SMM 012.

[Illustration and Explanation]

The example for this macro command, please refer to the example in macro command point 44 of this manual.

- *Before using this macro command, PELCO system should be setup properly. Setting up every needed to use command, and assigned a number to each command (SMM xxx).*

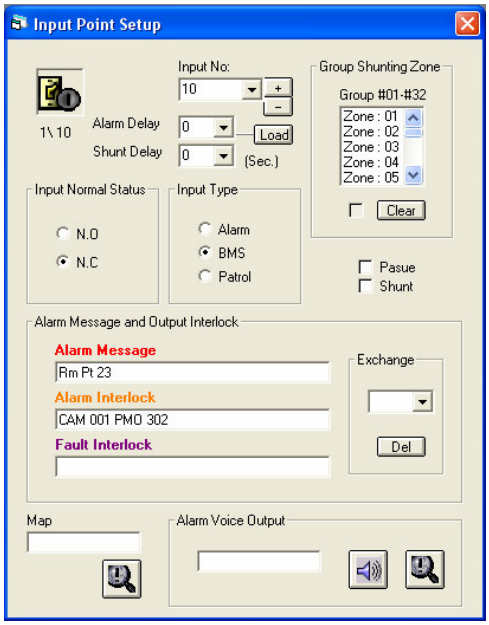
44. CAM xxx PMO yyy

This macro command is only used in PELCO system. This is to enable a particular camera (CAM) to move to a specific location preset in the PELCO P/T/Z Camera receivers/drivers (PMO).

[Parameters]

xxx	Camera number which connects to PELCO matrix
yyy	Specific preset location number

[Setup]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #10.

iv. Select the Input Type. For example: BMS.

v. At the Alarm Interlock, fill in the macro command. For example, CAM 001 PMO 302.

[Illustration and Explanation]

```
        SMM 012              ; way of scripting  in PELCO system
        CAM 001 PMO 302      ; Camera #1 move to PELCO preset location #2
        MON 002 CAM 001
        ACU 001 OUT 003
END
```

For instance, in the building, alarm input point #10 is activated, MEGASYS SYSTEM will receive this alarm signal. At the same time, MEGASYS SYSTEM will execute the macro command. For example, macro command, SMM 012. This macro command means that it is calling and executes the 12th files in the PELCO system.

Inside the 12th file, #1 PELCO P/T/Z receiver/driver will move to preset position #2. Follow by video of camera #1 on the P/T/Z receiver/driver will be displayed on Monitor #2. At the same time, a signal is send out to alarm output point #3 of the alarm controller.

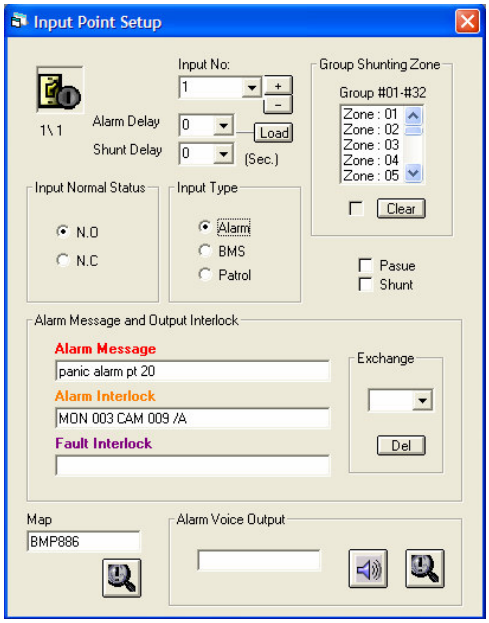
45. MON xxx CAM yyy /A

This macro command is usually applied at the specific alarm point of the alarm interlock. This commands the specific required camera (CAM) to appear at the specific monitor (MON), which displays the video captures.

[Parameters]

xxx	Monitor number from 001 to 160
yyy	Camera number from 001 to 640

[Setup]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #1.

iv. Select the Input Type. For example: Alarm.

v. At the Alarm Interlock, fill in the macro command. For example, MON 003 CAM 009 /A.

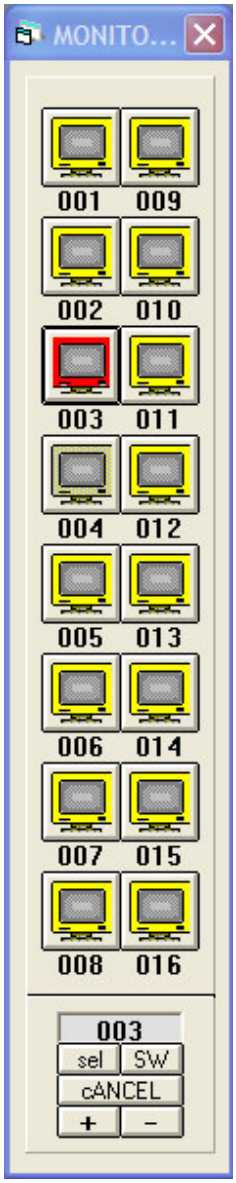
[Illustration and Explanation]

MON 003 CAM 009 /A

Real Scenario: When an alarm point is triggered, the icon representing this specific alarm point from yellow changes to red and keep flashing.

⌦ Click on [Monitor Control], a window shown up displaying 16 numbers of monitors - Monitor Control Selection.

⌦ In the window – Monitor Control Selections, monitor #3 icons will turn red, this means that it is executing alarm routine, displaying camera #9 on the monitor. Upon clicking the reset button, monitor #3 will resume back to pre-define routine, continue to display sequence, camera #5 and #6.



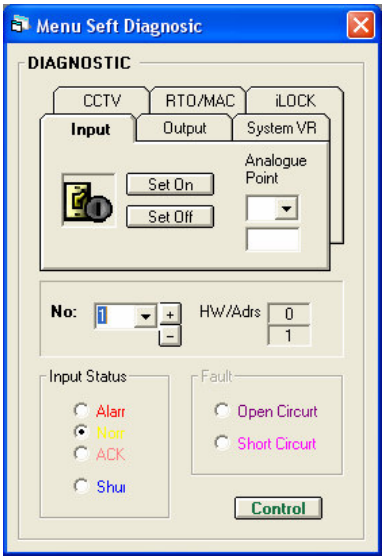
Simulate Scenario:

- Using alarm point #1 as first, and the command entered in the alarm interlock is MON 003 CAM 009 /A.
- Using alarm point #34 as second, and the command script entered in the alarm interlock is MON 003 CAM 010 /A, MSG {MSG1}.

⌦ When there is no alarm happens, monitor #3 will only display the pre-defined camera display. For example, during normal operation, monitor #3 displays only camera #5 and camera #6 non-stop.

⌦ When there is alarm happens, color of the icon representing alarm point will turn red. If the alarm interlock contains command script "MSG {MSG1}", alarm message window with follow up action found in file MSG1 will pop up.

How to carry out simulation test?



i. Click on the [Self Diagnostic] icon from the menu bar.

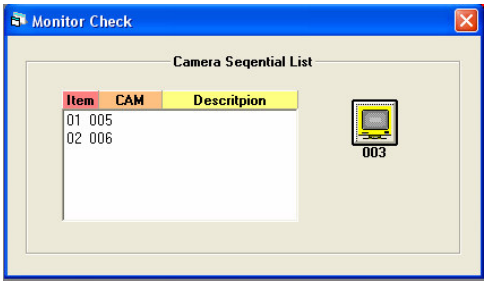
ii. A window appears as shown on the left - Menu Self Diagnostic.

iii. Choose Input under the tab bar

iv. Select the input number that needs to execute testing. For example, #1.

v. In input tab bar, click Set On.

vi. Input #1 is triggered. The color of the icon from yellow becomes red and it keeps flashing non-stop.



i. Click on the [Monitor] icon on the menu bar.

ii. A window with 16 monitor will shown. Among them, monitor #3 has turned to red.

iii. Click on monitor #3, another window pop up as shown on the left – Alarm Monitor.

iv. Under the Monitor Check window, video of camera #9 is displayed and under recording mode.

v. Clicking reset button, monitor #3 executes the pre-defined setting displaying camera #5 and #6 in sequence non-stop.

If user, at the same time, simulates more than one alarm point, for example, alarm point #34, user just requires repeating step 3. Upon clicking monitor #3's icon, video from camera #9 and camera #10 are displaying in sequence on monitor 3. (If DVR is connected, despite display video, at the same time, records the video too.)

- *During alarm triggering, if there is any video from the second camera added to monitor #3, the video from the first camera will not be replaced or removed. This is because the first camera is not reset. Therefore, under this scenario, it creates sequencing for the two cameras on monitor #3. The dwell time for display will be the same for both cameras.*

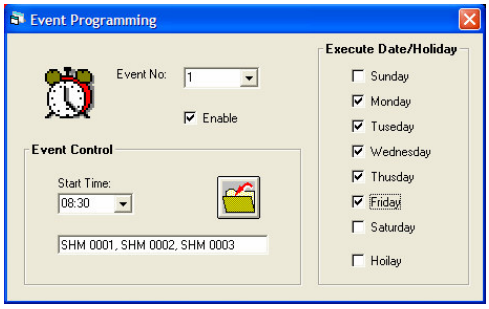
46. SHM xxxx

This macro command is used to bypass/shunt the alarm input point. Often used together with the SHO macro command in this manual point 19.

[Parameters]

xxxx	Alarm input points (1 ~ 2048)

[Setup]



i. Look for [System Setup] in the menu bar, select [Time Events] icon located near to the bottom of the [System Setup] window.

ii. A window appears as shown on the left - Event Programming.

iii. Select the Event Number by the down arrow, example Event No. #1.

iv. Enter the Start Time that needs to execute the macro command. For example, 08:30

v. At the execute macro command space provided; fill in the required macro command. For example, SHM 0001, SHM 0002, SHM 0003.

vi. Under execute Date/Holiday, choose the execution day or only execute on holiday.

vii. Remember to enable the event for execution when times up. For all settings done in Event Programming, click on the "save" icon to save the setup.

[Illustration and Explanation]

SHM 0001, SHM 0002, SHM 0003

For instance, there is a company that requires security system that executes periodically. When the time is up (can be the start working time) 08:30, MEGASYS SYSTEM in this company will executes this macro command. In this case, alarm input #1, #2 and #3 will be bypassed which prevent the employee to trigger the alarm when back to work. Refer to Figure 30-1 in macro command point 30.

47. IF Vxx = yyyy THEN

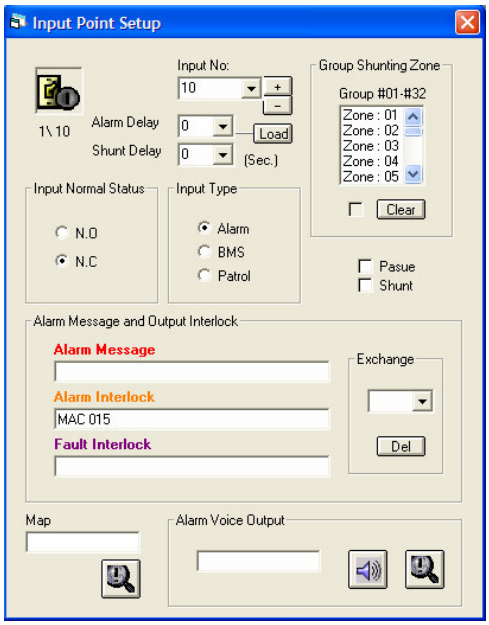
This macro command is a conditional command. Vxx = yyyy is the condition. If the condition is true, all the command scripts will be executed after THEN. If the condition is false (not the same), all the command scripts after THEN will not be executed, jump immediately to the command after ENDIF and continue its execution.

[Parameters]

xx	Variable number (1 ~ 99)
yyyy	Integer whole number (1 ~ 32768)

- *Normally using this macro command will not use alone, but combined with other macro command scripts. Therefore, this macro command will put in use in a MACRO file.*

[Setup]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #10.

iv. Select the Input Type. For example: Alarm.

v. At the Alarm Interlock, fill in the macro command. For example, MAC 015.

[Illustration and Explanation]

In a company for a particular alarm point, place the macro command in that alarm interlock. For example, in the alarm interlock of alarm point #10 fills with this macro command (as shown in figure 47-1).

Before working time starts, when triggers alarm input point #10, MEGASYS SYSTEM will execute the upper half of the macro command script. Bring the video of camera #15 to display on monitor #1. Next is checking the condition, V15 = 0. If the condition is true, the alarm alert is switch off (Master Alarm). At the same time, there is alarm message, MSG1, shown at the MEGASYS SYSTEM. Door #10 will be locked too; therefore, no one is allowed to enter/exit. Follow is the ENDIF command, meaning end of the condition execution and jump to the next executable command.

After knocking off time, the alarm point #10 that has triggered before working time starts, MEGASYS SYSTEM will execute the command in the macro file from top to bottom. Show the video of camera #15 and display on monitor #1. Next is checking the condition if the V15 = 1. Since V15 = 1, the command from line 3 to 5 will not be executed and jump immediately to line 6 (ENDIF), which finishes the condition check. Continue line 7 macro command, which V15 = 1 is true; therefore line 8 to 10 macro command will be executed. The alarm alert is switch on (Master Alarm). At the same time there is alarm message, MSG2, show at the MEGASYS SYSTEM. Door #10, #1 and #2 will be unlocked which does not allow anyone to enter/exit. Follow is the ENDIF command, meaning end of the condition execution.

Zone 10 (*MAC 015)

```
001     MON 001 CAM 015
002     IF V15=0 THEN                   ; If it is during operating hours
003     ALA 000                         from 9:00 ~ 17:30, will
004     MSG {MSG1}                      execute these commands till
005     LKD 010                         ENDIF.
006     ENDIF
007     IF V15=1 THEN                   If it is during operating hours
008     ALA 001                         from 17:31 ~ 08:59, will
009     MSG {MSG2}                      execute these commands till
010     LKD 010, LKD 001, LKD 002       ENDIF.
011     ENDIF
012     END
```

Figure 47-1 Example of Macro file of IF Vxx = yyyy

48. ENDIF

This macro command is used to indicate to MEGASYS SYSTEM the end of execution of the macro command IF THEN. After this macro command, the following command does not belong to the macro command IF THEN.

[Parameters]

None

- *This macro command is usually used with macro command IF THEN. Usually written in the macro file.*

[Setup]

Please refer to setup of macro command point 47.

[Illustration and Explanation]

Please refer to example of macro command point 47.

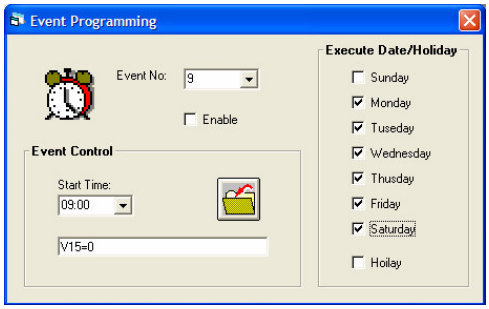
49. Vxx = yyyy

This macro command is to initialize a specific variable to an integer value, between 1 ~ 32768, which usually apply in comparison. (For example, use within the macro command, IF THEN.)

[Parameters]

xx	Variable number (1 ~ 99)
yyyy	Integer whole number (1 ~ 32768)

[Setup]



i. Look for [System Setup] in the menu bar, select [Time Events] icon located near to the bottom of the [System Setup] window.

ii. A window appears as shown on the left - Event Programming.

iii. Select the Event Number by the down arrow, example Event No. #9.

iv. Enter the Start Time that needs to execute the macro command. For example, 09:00.

v. At the execute macro command space provided; fill in the required macro command. For example, V15 = 0.

vi. Under execute Date/Holiday, choose the execution day or only execute on holiday.

vii. Remember to enable the event for execution when times up. For all settings done in Event Programming, click on the "save" icon to save the setup.

[Illustration and Explanation]

Please refer to example of macro command point 47.

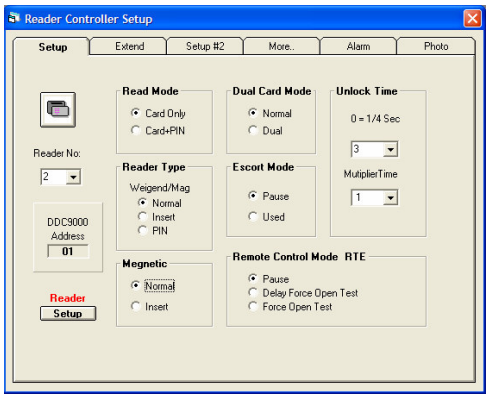
50. Vxx+

This macro command is used to increment the values of variable, Vxx, by 1.

[Parameters]

xx	Variable number (1 ~ 99)

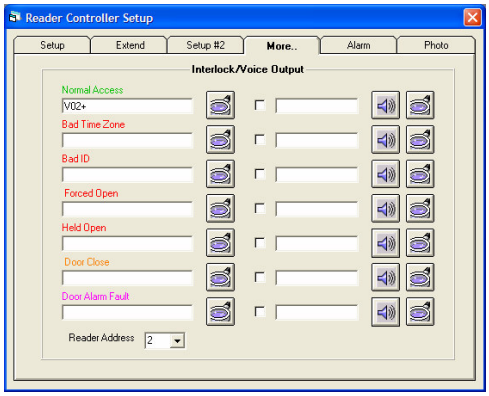
[Setup]



i. Click on the [System Setup] icon and look and click on [Access Control Setup] icon. Next select the sixth icon which is the [Card Reader Setup].

ii. A window appears as shown on the left, Reader Controller Setup with total of 6 tab windows.

iii. At the first tab that is the setup, select the address of the card reader. For example, reader #2.



iv. Select the tab number 4 which show More setup

v. Fill in the macro command under first interlock, Normal Access. For example, V02+.

vi. This completes the setup.

[Illustration and Explanation]

The easiest application is as an access in/out counter.

V02+
V02-

In a museum, there is two red light infrared beam devices to detect people enter and exit. At the card reader #1 (entrance) normal access set as V02+ (as macro command point 50) and card reader #2 (exit) normal access set as V02- (as macro command point 51).

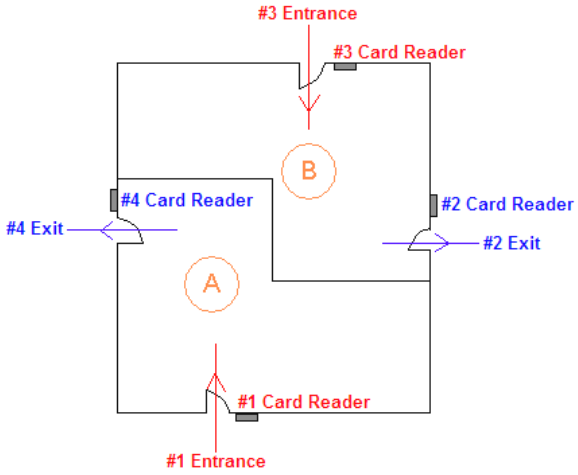
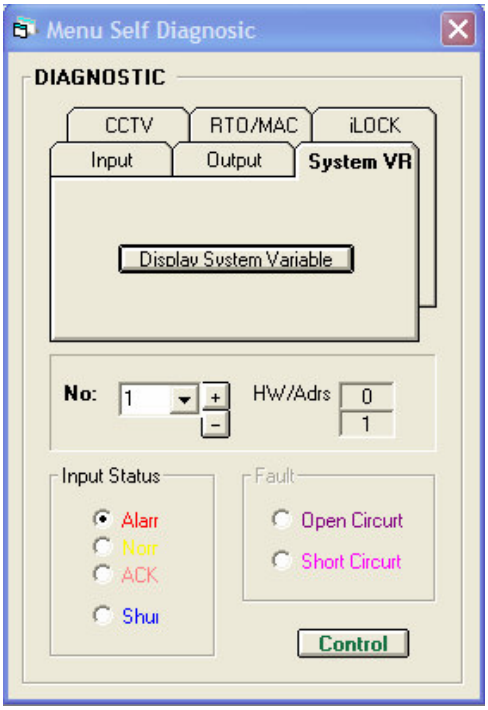


Figure 50-1 An access in/out counter example for Vxx+

Anyone that entered entrance #1, card reader #1 detecting anyone enters, V02 will increment by 1. When someone used exit #2 to depart, card reader #2 detecting someone exits, V02 will decrement by 1.

 When user uses this macro command, at the same time can observe the changes.

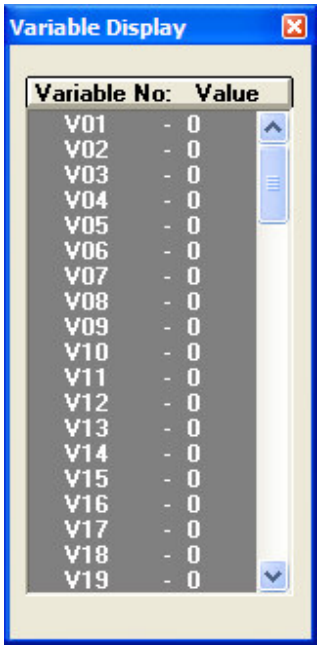


i. Click on the [Self Diagnostic] icon from the menu bar.

ii. A window appears as shown on the left - Menu Self Diagnostic.

iii. Choose the 3rd tab, System VR under the tab bar.

iv. Click [Display System Variable].



v. Another window appears as shown on the left -Variable Display.

51. Vxx-

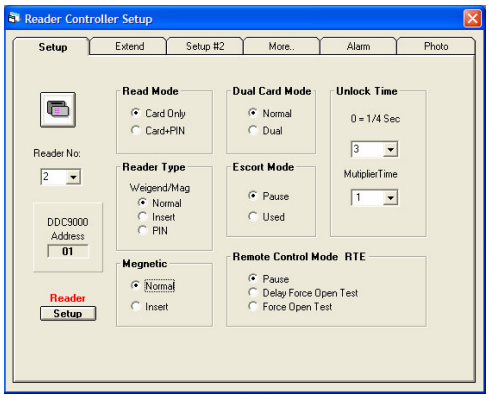
This macro command is used to decrement the values of variable, Vxx, by 1.

[Parameters]

xx	Variable number (1 ~ 99)

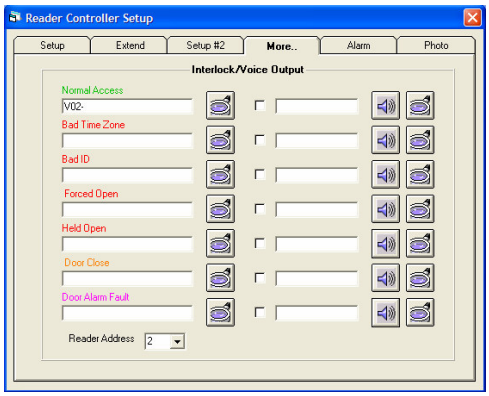
[Setup]

vii. Click on the [System Setup] icon and look and click on [Access Control Setup] icon. Next select the sixth icon which is the [Card Reader Setup].



viii. A window appears as shown on the left, Reader Controller Setup with total of 6 tab windows.

ix. At the first tab that is the setup, select the address of the card reader. For example, reader #2.



x. Select the tab number 4 which show More setup

xi. Fill in the macro command under first interlock, Normal Access. For example, V02-.

xii. This completes the setup.

[Illustration and Explanation]

Please refer to example of macro command point 50.

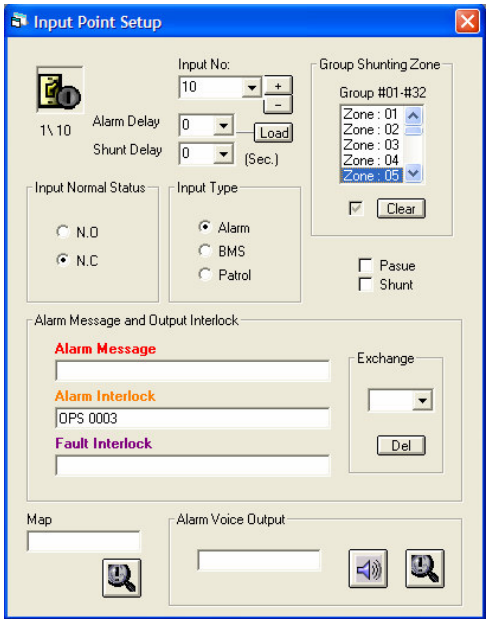
52. OPS xxxx

This macro command is used to temporary disable a specific output to give out any alarm signal.

[Parameters]

xxxx	Alarm input points (1 ~ 2048)

[Setup]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #10.

iv. Select the Input Type. For example: Alarm.

v. At the Alarm Interlock, fill in the macro command. For example, OPS 0003.

[Illustration and Explanation]

For an instance, a particular door in a company, when there is someone entering/exiting this door requires accessing the key switch. In this way, it will not trigger alarm out #3 to sound any siren.

OPS 003

Before a person can use the specific door to leave the place, this person is required to turn the key switch as the alarm point #5. This key switch is using ET-8C500 to report signal back to MEGASYS SYSTEM. Signal of this key switch through ET-8C500 returns to MEGASYS SYSTEM, MEGASYS SYSTEM will execute the macro command at the alarm interlock. Through ET-8C500, alarm output #3 will be temporary disabled to prevent sounding any siren. (Refer to Figure 52-2.)

On the icon on top, representing key switch, alarm input point #5, is turned, upon pushing the door to leave, alarm output point #3 on the bottom will be temporary disabled to sound any siren.

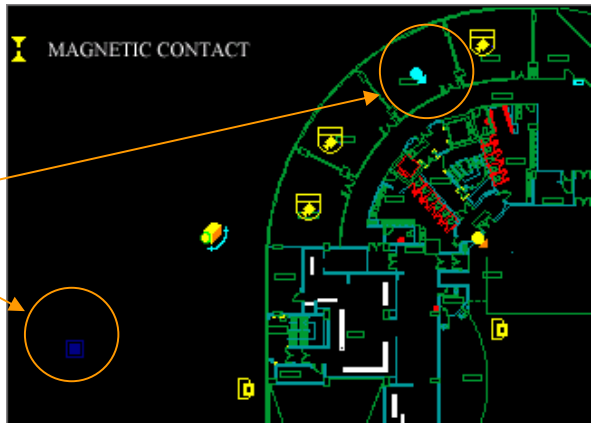


Figure 52-1 OPS example for alarm icons representation on the map

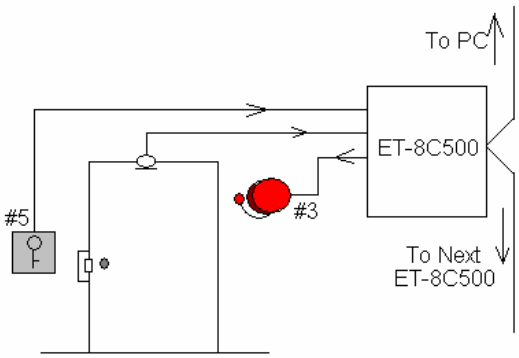


Figure 52-2 Drawing illustrating OPS

53. WSR {IP~xx}

This macro command is only suitable to use on AXIS Web Server System. If the system contains AXIS Web Server installed, user at MEGASYS SYSTEM can use this macro command to open up any video of the AXIS camera.

[Parameters]

IP	Static IP address of AXIS Web Server (True IP).
xx	Camera number which installed with AXIS Web Server.

[Illustration and Explanation]

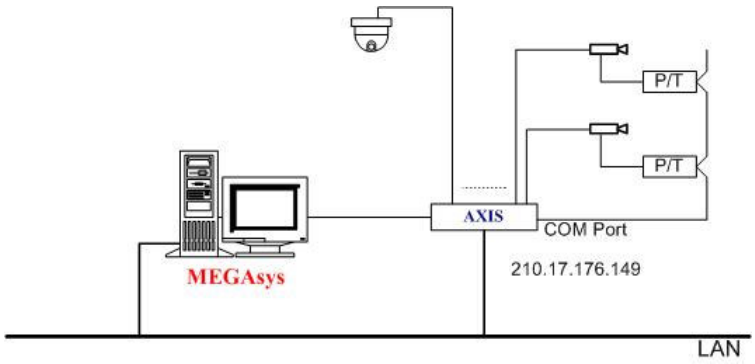
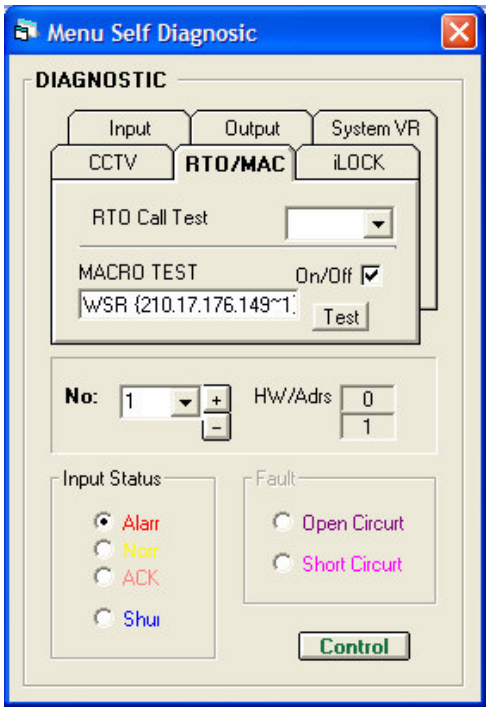


Figure 53-1 AXIS Web Server connecting to MEGASYS SYSTEM on LAN

WSR {210.17.176.149~1}

With reference to the Figure 53-1 above, MEGASYS SYSTEM has displayed and stored the video from the AXIS Web Server. The method used is through the TCP/IP to bring the video to MEGASYS SYSTEM.



i. Click on the [Self Diagnostic] icon from the menu bar.

ii. A window appears as shown on the left - Menu Self Diagnostic.

iii. Choose the 5th tab, RTO/MAC under the tab bar.

iv. At the Macro Test, input the macro command, WSR {210.17.176.149~1}.

v. Check the On/Off box beside.

vi. Lastly, press the button Test. On the MEGASYS SYSTEM desktop, user will get to see a window with camera image #1 with IP address 210.17.176.149 which belongs to the AXIS Server.

54. SHL { xxx.EXE}

This is a macro command to execute different "EXE" files to work together with MEGASYS SYSTEM. Different "EXE" files like the "EXE" file for WinTV Capture card, the "EXE" file of Notepad and etc.

[Parameters]

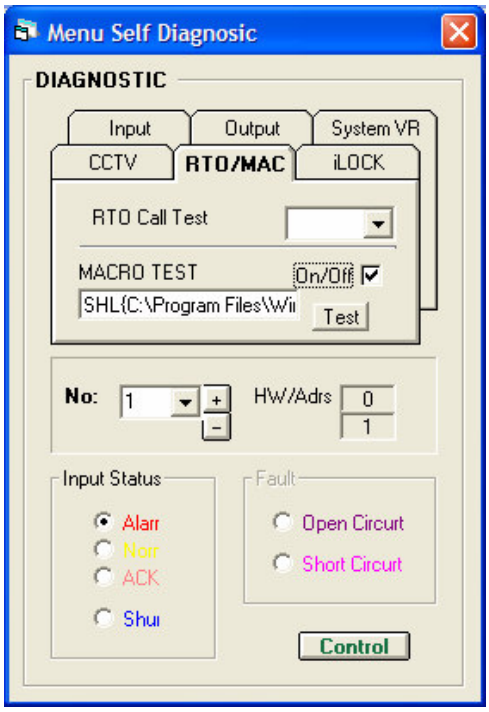
{xxx.EXE} Path and name of the EXE file.

- *For example, SHL{C:\Program File\ WinTV\WinTV2K.EXE} is the correct entry for execution.*

[Illustration and Explanation]

SHL {C:\Program Files\WinTV\WinTV2K.EXE}

Operator is required to make use of third party software to enter Chinese wordings to the system. In order to do so, operator can make use of this macro command to call the needed EXE file. Examples like the WinTV video software, Richwin Chinese Writing software and etc.



i. Click on the [Self Diagnostic] icon from the menu bar.

ii. A window appears as shown on the left - Menu Self Diagnostic.

iii. Choose the 5th tab, RTO/MAC under the tab bar.

iv. At the Macro Test, input the macro command, SHL{C:\Program Files\WinTV\WinTV2K.EXE}.

v. Check the On/Off box beside.

vi. Lastly, press the button Test. On the MEGASYS SYSTEM desktop, WinTV2000 window shown as below.

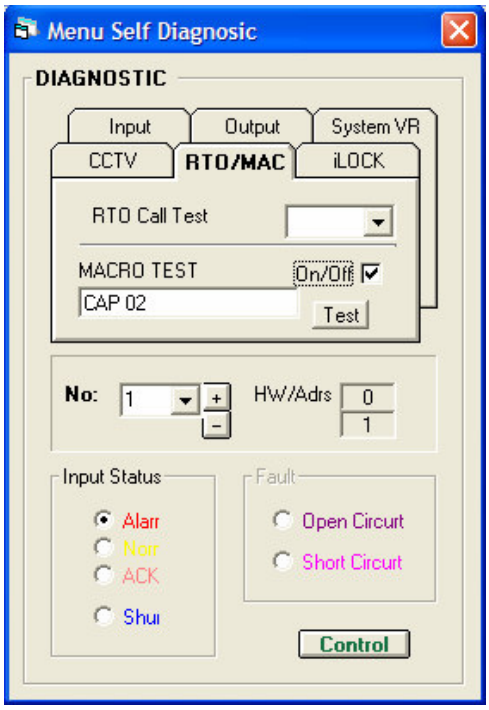
55. CAP xx

This macro command is used to capture a shot of the video from the camera and save as BMP picture type. This macro command works with AXIS Web Server that transfer back the video images which works together with macro command, WSR{IP~xx) to see effect. Before using this command, user must ensure that AXIS Web Server is installed.

[Parameters]

xx	Number of picture snapshot from 01 ~ 04. Maximum 4 pictures per second.

[Illustration and Explanation]



i. Click on the [Self Diagnostic] icon from the menu bar.

ii. A window appears as shown on the left - Menu Self Diagnostic.

iii. Choose the 5th tab, RTO/MAC under the tab bar.

iv. At the Macro Test, input the macro command, CAP 02.

v. Check the On/Off box beside.

vi. Lastly, press the button Test. MEGASYS SYSTEM will take two snapshot of the video from AXIS Web Server and save as BMP picture format. The files are automatically stored in folder /megasys/VCR. Filename will be the date of capture.

For example the capture date is on 15th Sep 2003, time is 11:20:14. Files saved in the Folder C:\megasys\VCR\..... are as below

Files are .....\030915\1120141.BMP
and .....\030915\1120142.BMP
} BMP File captures

……\	030915\ YYMMDD • YY -> Year • MM -> Month • DD -> Day	1120141.BMP hhmmssn.BMP • hh -> Hour • mm -> Minute • ss -> Second • n -> Number

Table 55-1 Explanation of filenames formed

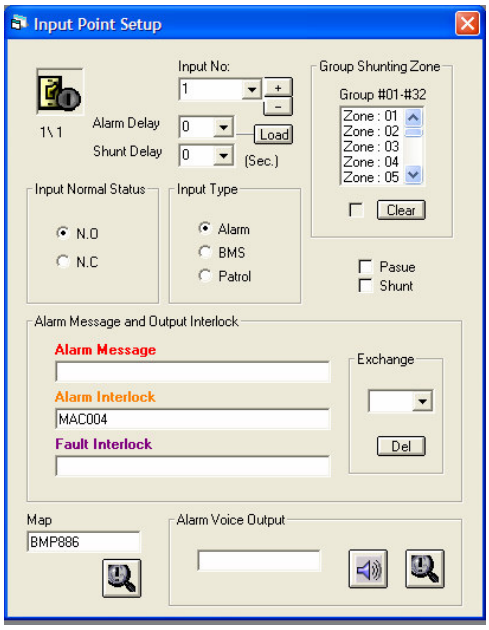
56. CAM xxx REC yyy

This macro command is used to record the video from specific model or type of Web Server. The suitable model or type of Web Server is AXIS. If the mentioned Web Server is connected to MEGASYS SYSTEM, then user can make use of this macro command to carry out recording.

[Parameters]

xxx	Camera number
yyy	Recording time from 1 ~ 300 sec. Not more than 5 minutes.

[Setup]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #1.

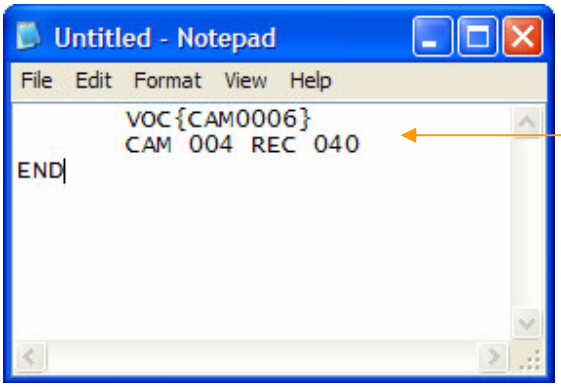
iv. Select the Input Type. For example: Alarm.

v. At the Alarm Interlock, fill in the macro command. For example, MAC004.

[Illustration and Explanation]

CAM 004 REC 040

For instance, alarm input #1 connect to an infrared detector, when infrared detector is triggered, MEGASYS SYSTEM will execute the macro command found under the alarm interlock.



When alarm input #1 is triggered, MEGASYS SYSTEM will follow the alarm interlock of alarm input #1 and execute the macro command. Operator will hear the playing of CAM006.WAV and at the same time, video of camera #4 will be recording for 40 seconds upon alarm triggering.

57. MDR {IP~xx}

This macro command is used only in MEGASYS SYSTEM, connected to the GEOVISION DVR. User can use this macro command to open up videos from the GEOVISION DVR.

[Parameters]

IP	Static IP address of GEOVISION DVR (True IP).
xx	Camera number (01~ 16) which connected to GEOVISION DVR, and maximum number of camera is 16.

[Illustration and Explanation]

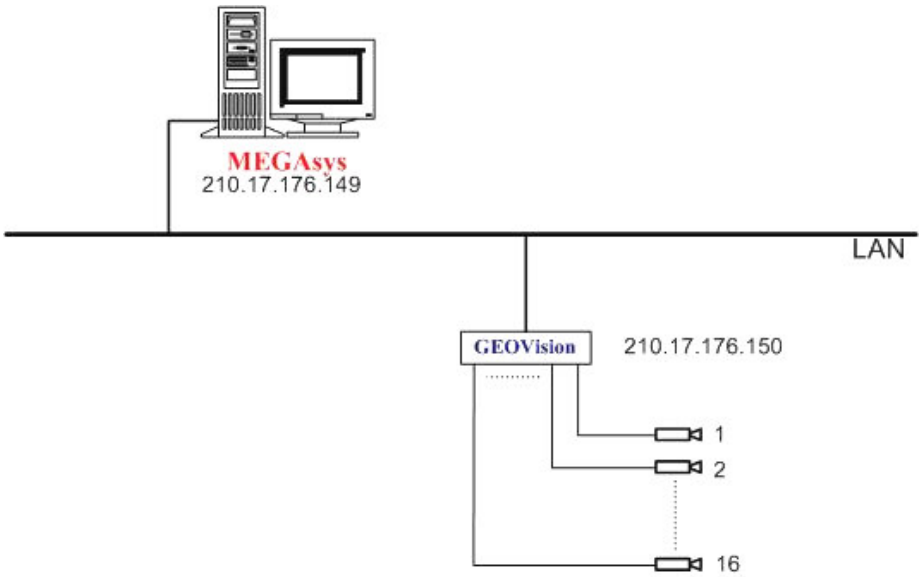
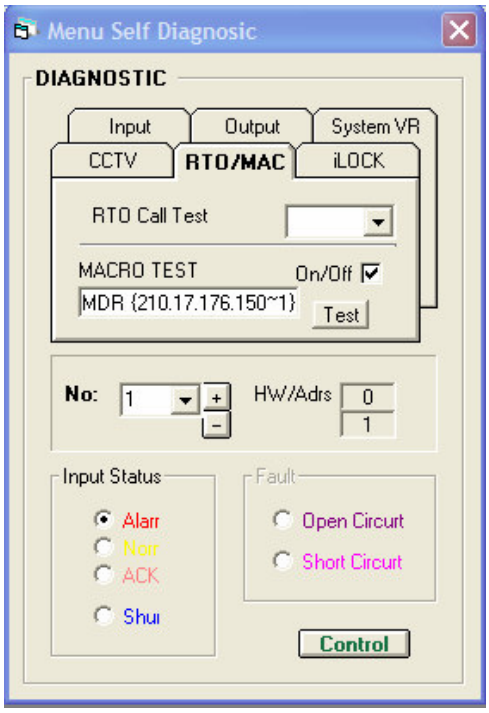


Figure 57-1 GEOVISION DVR connecting to MEGASYS SYSTEM on LAN

MDR {210.17.176.150~1}

With reference to the Figure 57-1 above, MEGASYS SYSTEM has displayed and stored the video from the GEOVISION DVR. The method used is through the TCP/IP to bring the video to MEGASYS SYSTEM.



i. Click on the [Self Diagnostic] icon from the menu bar.

ii. A window appears as shown on the left - Menu Self Diagnostic.

iii. Choose the 5th tab, RTO/MAC under the tab bar.

iv. At the Macro Test, input the macro command, MDR {210.17.176.150~1}.

v. Check the On/Off box beside.

vi. Lastly, press the button Test. On the MEGASYS SYSTEM desktop, user will get to see a window with camera image #1 with IP address 210.17.176.150 which belongs to the GEOVISION DVR.

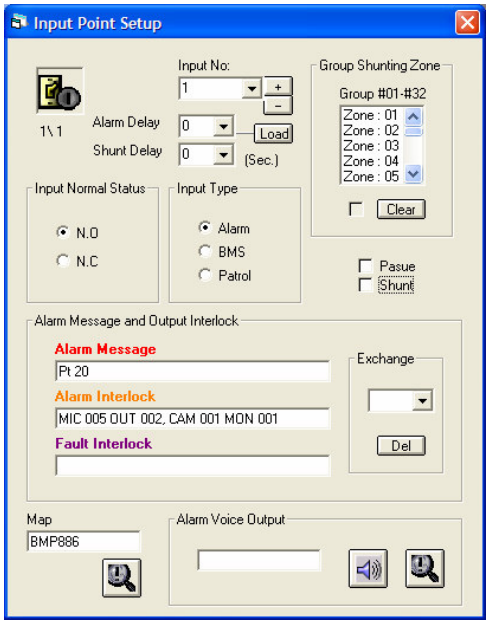
58. MIC xxx OUT yyy

This macro command is used to switch the input channel (MIC IN) of the audio matrix to the specific output channel (OUT) of the audio matrix.

[Parameters]

xxx	Input channel of audio matrix (MIC IN) from 001 ~ 640.
yyy	Output channel of audio matrix from 001 ~ 160

[Setup]



i. Click on the [System Setup] icon and look and click on [Input Setup] icon. Select the first icon which is the [Input Setup].

ii. A window appears as shown on the left, Input Point Setup.

iii. Select the Input Number, example Input #1.

iv. Select the Input Type. For example: Alarm.

v. At the Alarm Interlock, fill in the macro command. For example, MIC 005 OUT 002, CAM 001 MON 001.

[Illustration and Explanation]

MIC 005 OUT 002

Using museum as an example, every night after closing time, after the patrol guard ensuring nobody in the premises, the security system installed in every hall will be turned on as shown in Figure 58-1.

If there is someone using Door #1 accessing the hall after closing, the alarm input #1 of the security system will be triggered, hence starts the execution of the macro commands in the alarm interlock. Turning on microphone #5 (MIC) so as to bring the audio back to output channel #2 (Speaker) of audio matrix for playing and switching the video of camera #1 that is brought back to display on monitor #1. Inspect and

listen to anyone that enters the exhibition hall, if needed, operator can inform the police or follow emergency instruction given.

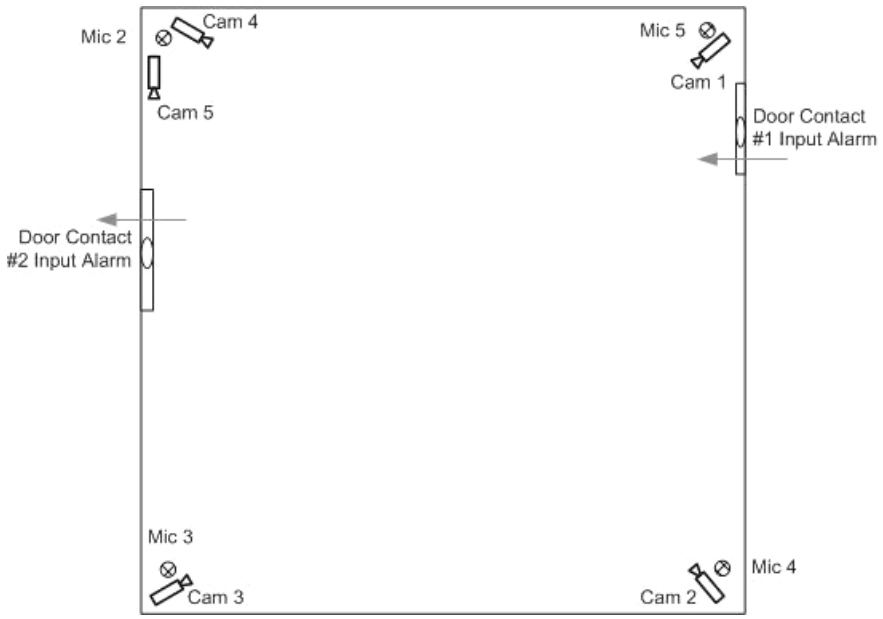


Figure 58-1 Layout of MIC placement in the museum

59. EVA xxx CYC yyy

The full name of EVA is Evacuator Control. This controller is meant for evacuation announcement making. When there is any emergency happens, making use of this macro command, allowing the evacuation or dispersion message to be played through this Evacuator Control to help people leaving the dangerous premises.

[Parameters]

xxx	Evacuator Control from 001 ~ 005.
yyy	Recycle play time from 001 ~ 300, maximum duration is 5 minutes.

[Illustration and Explanation]

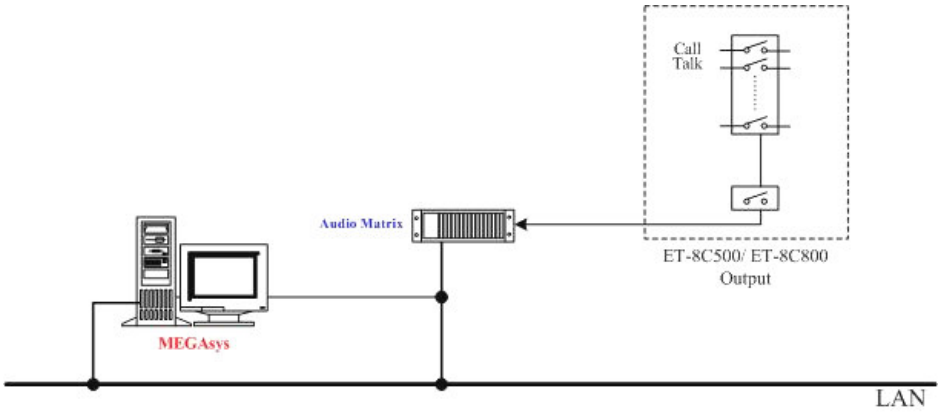
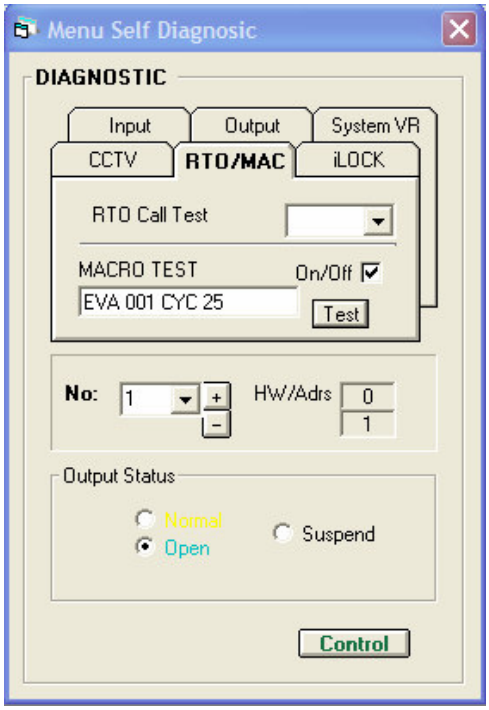
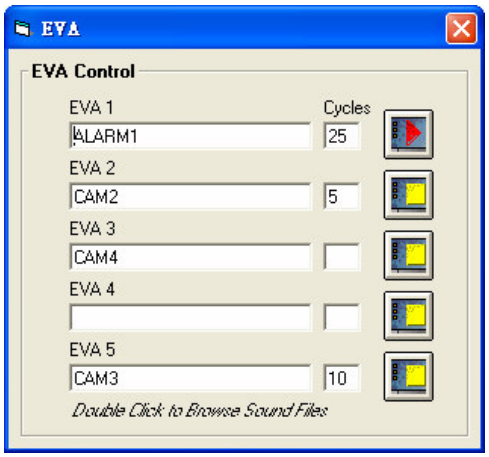


Figure 59-1 MEGASYS Interface with Audio Matrix and 8C500

EVA 001 CYC 025

This macro commands can be tested through the Self Diagnostic feature available in MEGASYS SYSTEM and steps are as follows.





i. Click on the [Self Diagnostic] icon from the menu bar.

ii. A window appears as shown on the left - Menu Self Diagnostic.

iii. Choose the 5th tab, RTO/MAC under the tab bar.

iv. At the Macro Test, input the macro command, EVA 001 CYC 025.

v. Check the On/Off box beside.

vi. Lastly, press the button Test. On the MEGASYS SYSTEM desktop, user will get to see an EVA window. Operator will get to hear the file played under EVA 1. At the same time, the value of cycles of EVA 1 has change to 25. The ON/OFF button represented by the yellow stop button has changed to red play button.

60. EVx {File}

This macro command is used to edit the name of the sound file for Evacuator Control. There are two methods of changing the name of the sound file. One method is changing at the [EVA Control] under [Sound Output Control]. For the first method, user must be familiar with operation setup in MEGASYS SYSTEM. The other method is using this macro command to change the name of file in [EVA Control] directly.

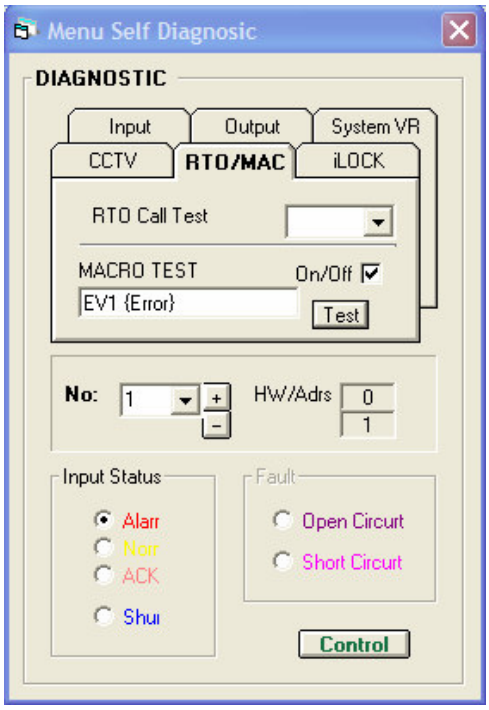
[Parameters]

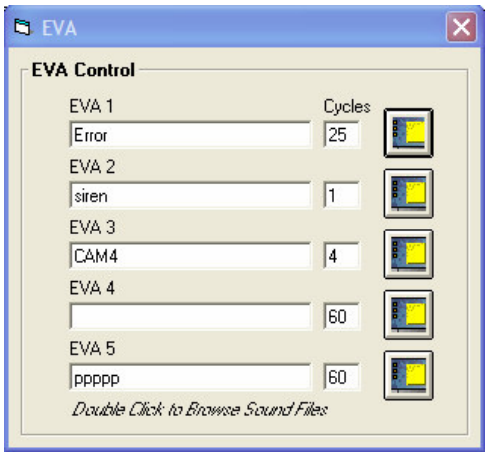
x	Evacuator Control from 001 ~ 005.
File	Name of the sound file, in ".WAV" format type.

[Illustration and Explanation]

EV1 {Error}

This macro commands can be tested through the Self Diagnostic feature available in MEGASYS SYSTEM and steps are as follows.





i. Click on the [Self Diagnostic] icon from the menu bar.

ii. A window appears as shown on the left - Menu Self Diagnostic.

iii. Choose the 5th tab, RTO/MAC under the tab bar.

iv. At the Macro Test, input the macro command, EV1 {Error}.

v. Check the On/Off box beside.

vi. Lastly, press the button Test. On the MEGASYS SYSTEM desktop, user can see that the file has changed as shown in the EVA window.

61. DVR {IP~xx}

This macro command is also suitable to use in MEGASYS SYSTEM, with MEGASYS Linux DVR connected. User can use this macro command to open up videos from the MEGASYS Linux DVR.

[Parameters]

IP	Static IP address of MEGASYS Linux DVR (True IP).
xx	Camera number (01~ 16) which connected to MEGASYS Linux DVR, and maximum number of camera is 16.

[Illustration and Explanation]

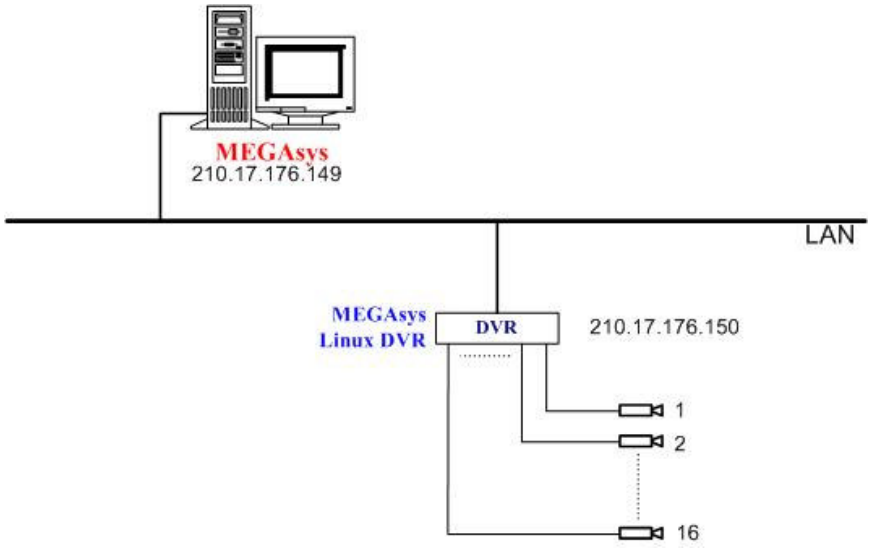
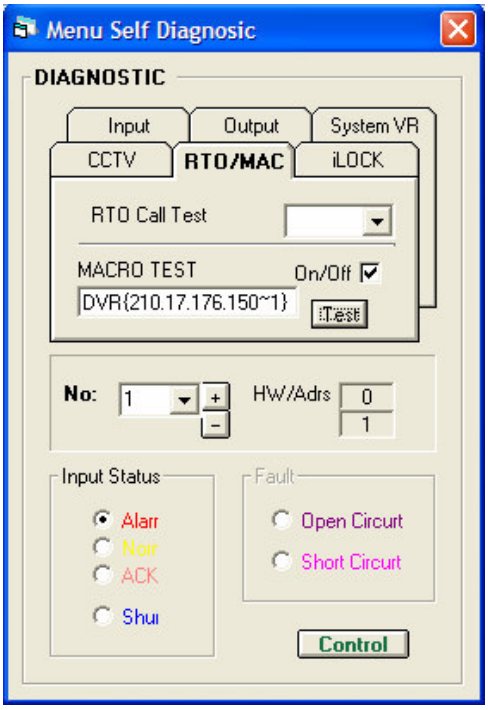


Figure 61-1 MEGASYS Linux DVR Connected to MEGASYS SYSTEM on LAN

DVR {210.17.176.150~1}

With reference to the Figure 61-1 above, MEGASYS SYSTEM has displayed and stored the video from the MEGASYS Linux DVR. The method used is through the TCP/IP to bring the video to MEGASYS SYSTEM.



i. Click on the [Self Diagnostic] icon from the menu bar.

ii. A window appears as shown on the left - Menu Self Diagnostic.

iii. Choose the 5th tab, RTO/MAC under the tab bar.

iv. At the Macro Test, input the macro command, DVR {210.17.176.150~1}.

v. Check the On/Off box beside.

vi. Lastly, press the button Test. On the MEGASYS SYSTEM desktop, user will get to see a window with camera image #1 with IP address 210.17.176.150 which belongs to the MEGASYS Linux DVR.

62. M64 {xxxx}

This macro command is used to call many video from multiple DVR. User can view situation at MEGASYS SYSTEM. Making use of the DVR 16Ch Control to setup and view videos from DVR with different splits from 2x2 till 10x10. User can setup different IP address of DVR in a single template for inspection purpose. User needs to put in the template name and the open up the pre-setup split with video.

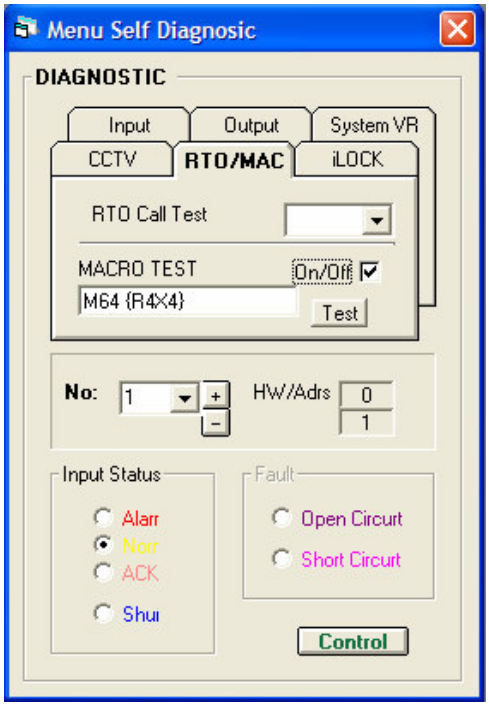
[Parameters]

xxxx	Name of the template created and saved under the DVR Remote Viewer.

[Setup]

M64 {R4X4}

Under the DVR 16CH Control, some of the templates have been created and saved in the Load Template e.g. Demo, 2x2, R4X4 and etc. Follow the steps below in order to open the R4X4 template.



i. Click on the [Self Diagnostic] icon from the menu bar.

ii. A window appears as shown on the left - Menu Self Diagnostic.

iii. Choose the 5th tab, RTO/MAC under the tab bar.

iv. At the Macro Test, input the macro command, M64 {R4X4}.

v. Check the On/Off box beside.

vi. Lastly, press the button Test. On the MEGASYS SYSTEM desktop, user will get to see a window NetVideo 64 with splits of 4x4. The window shows 16 videos which are placed during setup as shown in Figure 62-1.

Figure 62-1 NetVideo 64 with 4x4 splits with total of 16 cameras

63. VSR {IP~x}

This macro command is used only in MEGASYS SYSTEM, connected to the Pixord Web Camera Server. User can use this macro command to open up video from the Pixord Web Camera Server.

[Parameters]

IP	Static IP address of Pixord Web Camera Server (True IP).
x	Camera number (1~4) connected to Pixord Web Camera Server.

[Illustration and Explanation]

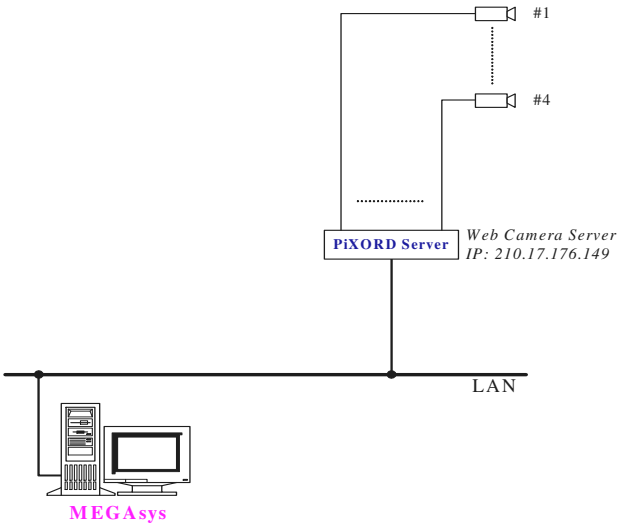
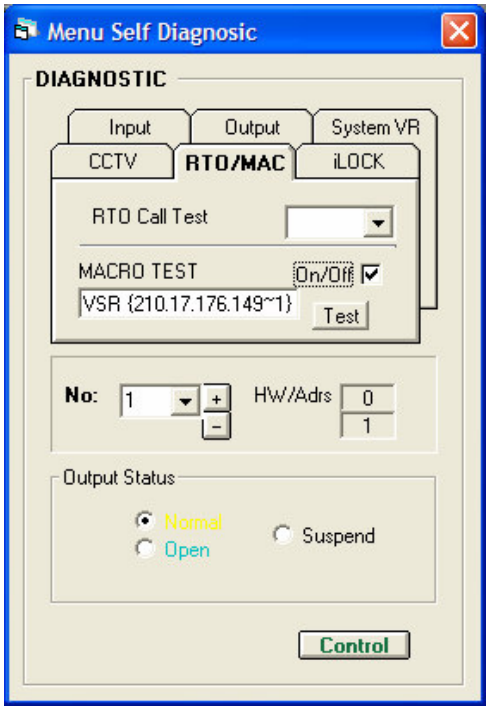


Figure 63-1 Pixord Web Camera Server Connected to MEGASYS SYSTEM on LAN

VSR {210.17.176.149~1}

With reference to the Figure 63-1 above, MEGASYS SYSTEM has displayed and stored the video from the Pixord Web Camera Server. The method used is through the TCP/IP to bring the video to MEGASYS SYSTEM.



i. Click on the [Self Diagnostic] icon from the menu bar.

ii. A window appears as shown on the left - Menu Self Diagnostic.

iii. Choose the 5th tab, RTO/MAC under the tab bar.

iv. At the Macro Test, input the macro command, VSR {210.17.176.149~1}.

v. Check the On/Off box beside.

vi. Lastly, press the button Test. On the MEGASYS SYSTEM desktop, user will get to see a window with camera image #1 with IP address 210.17.176.149 which belongs to the Pixord Web Camera Server.

64. SVD {IP~xx}

This macro command is used only in MEGASYS SYSTEM. User can use this macro command to open up video from the Sky View DVR.

[Parameters]

IP	Static IP address of Sky View DVR (True IP).
xx	Camera number (01~ 16) which connected to Sky View DVR, and maximum number of camera is 16.

[Illustration and Explanation]

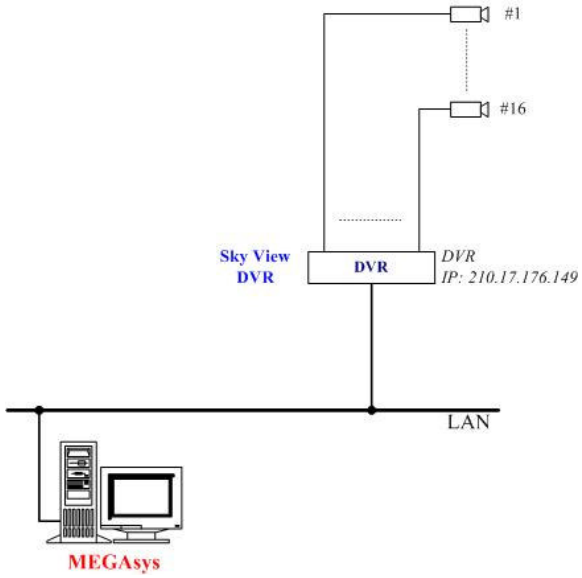
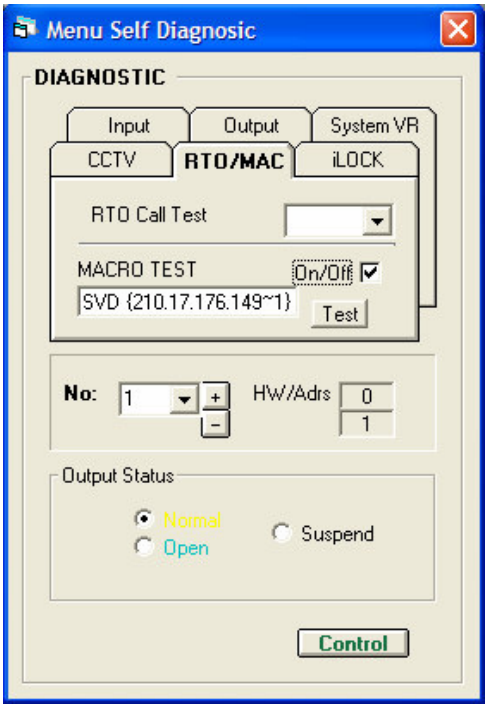


Figure 64-1 Sky View DVR Connected to MEGASYS SYSTEM on LAN

SVD {210.17.176.149~1}

With reference to the Figure 64-1 above, MEGASYS SYSTEM has displayed and stored the video from the Sky View DVR. The method used is through the TCP/IP to bring the video to MEGASYS SYSTEM.



i. Click on the [Self Diagnostic] icon from the menu bar.

ii. A window appears as shown on the left - Menu Self Diagnostic.

iii. Choose the 5th tab, RTO/MAC under the tab bar.

iv. At the Macro Test, input the macro command, SVD {210.17.176.149~1}.

v. Check the On/Off box beside.

vi. Lastly, press the button Test. On the MEGASYS SYSTEM desktop, user will get to see a window with camera image #1 with IP address 210.17.176.149 which belongs to the Sky View DVR.

65. AXy {File}

This macro command is used to link up some external programs that provided as EXE, executable file, to be added to MEGASYS SYSTEM to be executed together. User can open up the initialization file, megasys.ini, to check the status of external ActiveX file features.

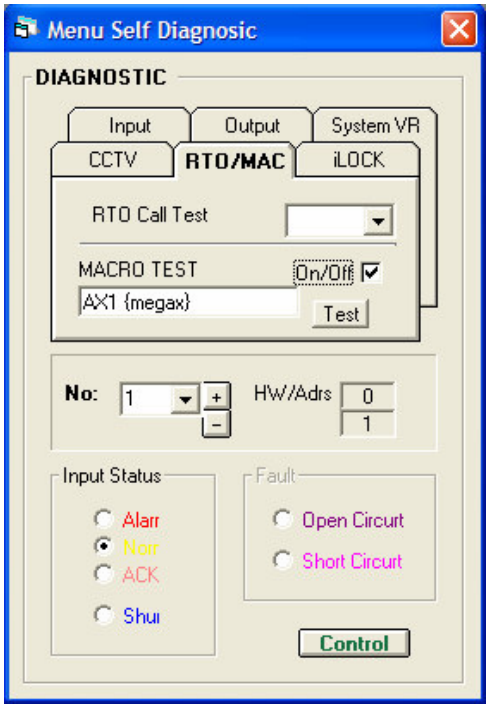
[Parameters]

y	Activate external ActiveX file with (0, 1). "0" is to turn off the feature, "1" is to turn on the feature.
File	Name of the external ActiveX file

[Illustration and Explanation]

AX1 {megax}

For instance, user wanted to control a specific brand of camera, and currently the camera is not supported by MEGASYS SYSTEM. User can activate the software control (.EXE executable file) of this camera by making use of this macro command, launching this software and use it simultaneously together with MEGASYS SYSTEM.



i. Click on the [Self Diagnostic] icon from the menu bar.

ii. A window appears as shown on the left - Menu Self Diagnostic.

iii. Choose the 5th tab, RTO/MAC under the tab bar.

iv. At the Macro Test, input the macro command, AX1 {megax}.

v. Check the On/Off box beside.

vi. Lastly, press the button Test. Megax.exe external software is added to MEGASYS SYSTEM. User who needs to use this camera control software, will just need to press the camera icon, MEGASYS SYSTEM will call out the respective control software.

66. SGO xxx

This macro command is used to switch on auto shunt or bypass schedule grouping.

[Parameters]

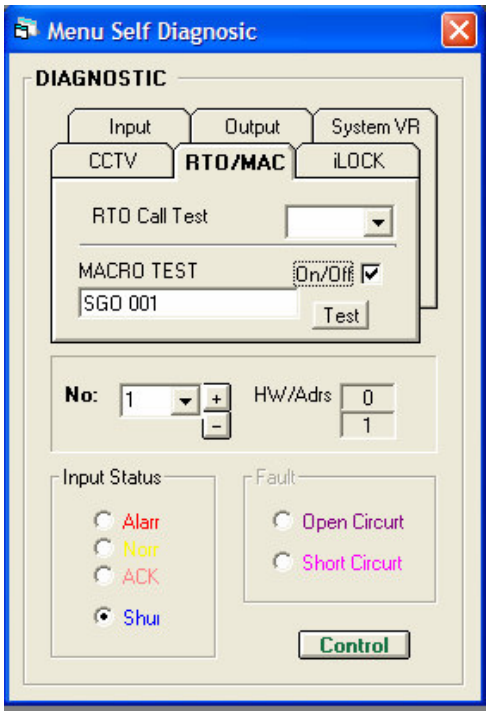
xxx	Auto shunt or bypassed timer group from 001 ~ 032.

[Illustration and Explanation]

SGO 001

The operating hours of the company for a particular level is from Monday to Friday, from 10am to 6pm. During start working time, all the alarm inputs will be automatically shunt, for the convenient of staff entering/exiting, which will not trigger any alarm. Only after operating hours, or not working days, all the alarm input will resume back to secure mode.

During holidays, some of the employees need to come back to work, operator can make user of this macro command to switch on the bypassing temporary, in order for the employee to work.



i. Click on the [Self Diagnostic] icon from the menu bar.

ii. A window appears as shown on the left - Menu Self Diagnostic.

iii. Choose the 5th tab, RTO/MAC under the tab bar.

iv. At the Macro Test, input the macro command, SGO 001.

v. Check the On/Off box beside.

vi. Lastly, press the button Test. MEGASYS SYSTEM immediately execute the macro command and shunt #1 auto shunt or bypassed timer group.

67. SGF xxx

This macro command is used to switch off auto shunt or bypass schedule grouping.

[Parameters]

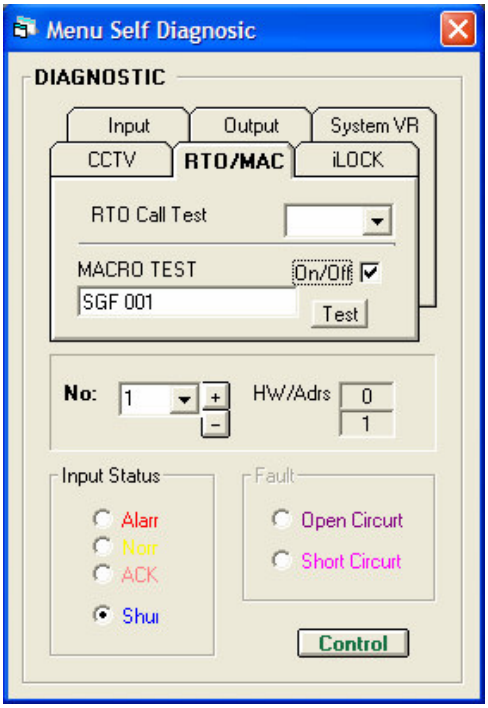
xxx	Auto shunt or bypassed timer group from 001 ~ 032.

[Illustration and Explanation]

SGF 001

The operating hours of the company for a particular level is from Monday to Friday, from 10am to 6pm. During start working time, all the alarm inputs will be automatically shunt, for the convenient of staff entering/exiting, which will not trigger any alarm. Only after operating hours, or not working days, all the alarm input will resume back to secure mode.

During holidays, some of the employees need to come back to work. So after working time is over, operator can make user of this macro command to switch off the bypassing, so as to prevent any intruders.



i. Click on the [Self Diagnostic] icon from the menu bar.

ii. A window appears as shown on the left - Menu Self Diagnostic.

iii. Choose the 5th tab, RTO/MAC under the tab bar.

iv. At the Macro Test, input the macro command, SGF 001.

v. Check the On/Off box beside.

vi. Lastly, press the button Test. MEGASYS SYSTEM immediately execute the macro command and secure back #1 auto shunt or bypassed timer group.

68. SGS xxx

This macro command is used to toggle the arm or disarm schedule grouping.

[Parameters]

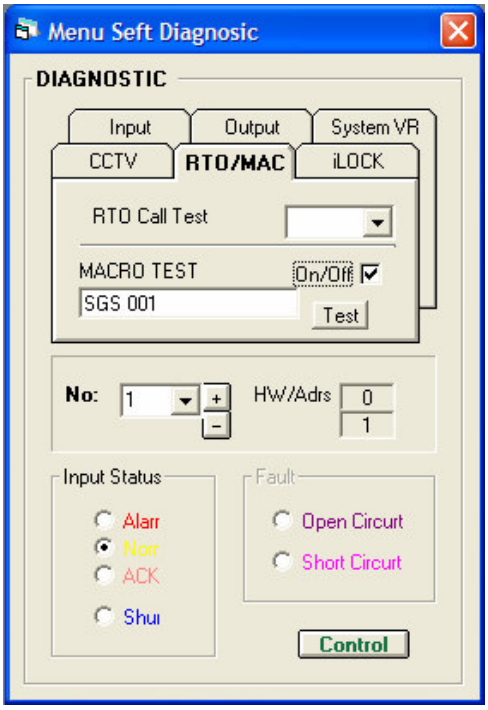
xxx	Auto shunt or bypassed timer group from 001 ~ 032.

[Illustration and Explanation]

There is a room; the opening hour (#1 input time) is from 10 am till 1 pm and from 3 pm till 8 pm. Under normal circumstances, it uses #1 and #2 arm/disarm schedule group. For instance, if there is anyone between 10 am to 1 pm whom needs to leave the room earlier (say 11.30am), this person can make use of this macro command.

Manually toggle the #1 arm or disarm schedule grouping (disarm status becomes arm status), and at 12:20pm returning back to the room, manually toggle the #1 arm or disarm schedule grouping again (arm status becomes disarm status). If there is anyone leaving the room at 12:35pm again, using the manually change the #1 arm or disarm schedule grouping again (disarm status becomes arm status). When 1pm reaches, MEGASYS SYSTEM will base on the previous setup, turning on the #1 arm or disarm schedule group to arm status. Due to the time grouping status at the 1pm is already in the arm status, #1 input time will still remain as arm status, till the next time allocation reaches.

This type of manual mode helps to change the status of the time grouping is named as toggle.



i. Click on the [Self Diagnostic] icon from the menu bar.

ii. A window appears as shown on the left - Menu Self Diagnostic.

iii. Choose the 5th tab, RTO/MAC under the tab bar.

iv. At the Macro Test, input the macro command, SGS 001.

v. Check the On/Off box beside.

vi. Lastly, press the button Test. MEGASYS SYSTEM immediately execute the macro command and change the status of #1 auto shunt or bypassed timer group.

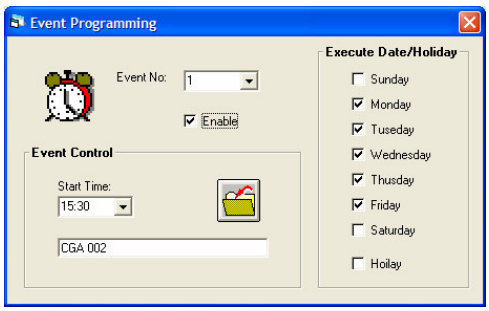
69. CGA xxx

CGA stands for Check Global Area. This macro command is used to check the situation of a certain zone area whether there is anyone in the zone area investigating the movement in that zone area.

[Parameters]

xxx	Global area zone from 001 ~128.

[Setup]



i. Look for [System Setup] in the menu bar, select [Time Events] icon located near to the bottom of the [System Setup] window.

ii. A window appears as shown on the left - Event Programming.

iii. Select the Event Number by the down arrow, example Event No. #1.

iv. Enter the Start Time that needs to execute the macro command. For example, 15:30.

v. At the execute macro command space provided; fill in the required macro command, CGA 002.

vi. Under execute Date/Holiday, choose the execution day or only execute on holiday.

vii. Remember to enable the event for execution when times up. For all settings done in Event Programming, click on the "save" icon to save the setup.

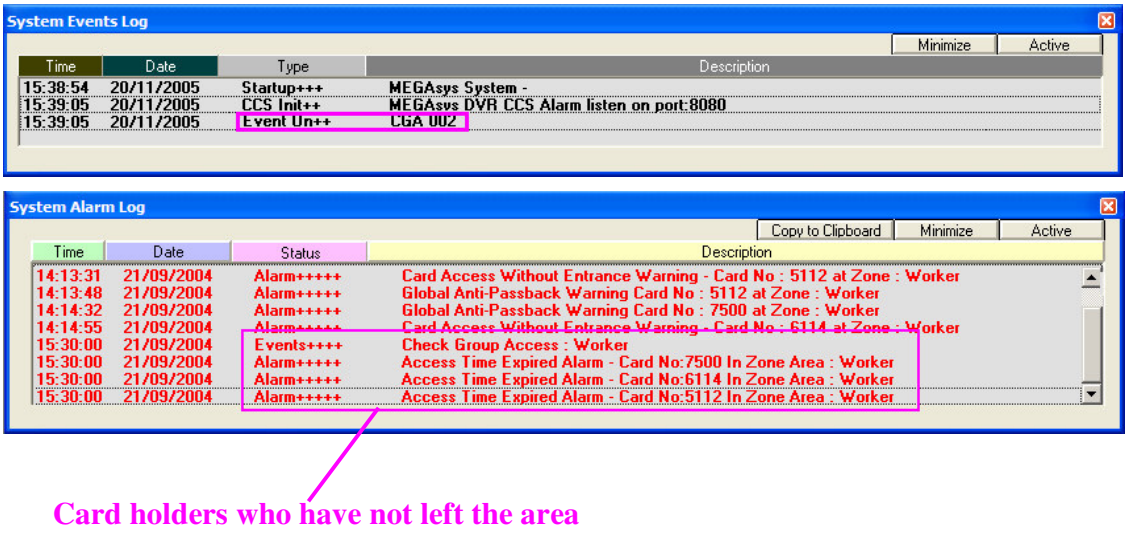
- *After setup, please remember to restart MEGASYS SYSTEM.*
- *Macro command explanation: "CGA xxx" – checking if anyone leaves that area.*

Every Monday till Friday when time reaches 15:30pm, MEGASYS SYSTEM will execute the macro command, checking whether anyone holding access card still in zone area #2. In the System Event Log window, there is macro command executed information displayed. If card holders have not left the zone area, there will be information shown in the System Alarm Log window, telling the operator to take action and follow up on those people that have not left the place.

[Illustration and Explanation]

CGA 002

Imagine that there is a particular area, on Monday till Friday at 15:30 MEGASYS SYSTEM will undergo executing the checking; making sure that there is no one inside. When no one is inside, then only it permits the second group of people to use. If there is anyone found in that area, MEGASYS SYSTEM will inform the operator to follow up.



Card holders who have not left the area