



AC180A 8 Input x 8 Output Composite Video Matrix Switch with Audio

AC182A 8 Input x 8 Output S-Video Matrix Switch with Audio

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General Specifications (8x8) (Audio)

INPUT:

Signal: Stereo Analog, Balanced or Unbalanced
Connectors: (8) 3.50 mm, 5 Position Terminal Block
Audio Impedance: 20K Ohms / Balanced
Frequency Response: 20 Hz to 20 KHz
Nominal Signal Level: +4 dBu / Balanced
Maximum Signal Level: +18 dBu / Balanced

OUTPUT:

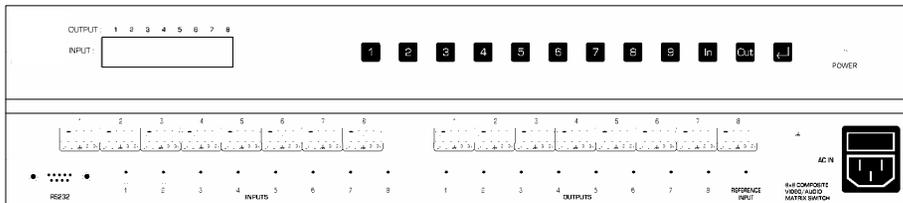
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Trademarks

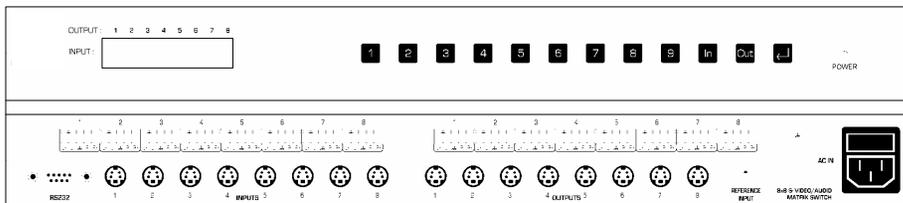
TRADEMARKS USED IN THIS MANUAL

Any trademarks mentioned in this manual are acknowledged to be the property of the trademark owners.

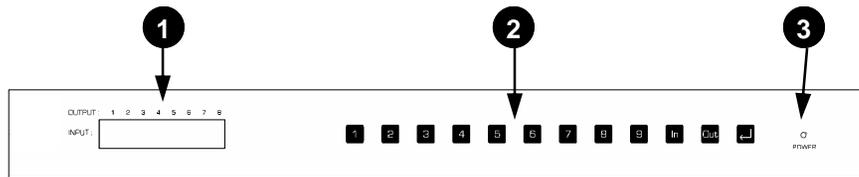
AC180A



AC182A



Panel Descriptions



FRONT PANEL LAYOUT

- 1. LCD DISPLAY MODULE:** Displays what input is connected to each output and pertinent information.
- 2. FRONT PANEL KEYPAD:** The 12 button keypad is used for switching and programming the unit.
- 3. POWER ON:** The LED illuminates green when power is applied to the unit.

General Specifications (8x8) (Video)

AC182A 8 INPUT, 8 OUTPUT S-VIDEO MATRIX SWITCH

INPUT:

Signal:	S-Video
Connectors:	(8) 4-pin Mini-DIN Female (1) BNC Female
Video Impedance:	75 Ohms Y/C
Video Level:	0.5 – 2.0 Vpp

OUTPUT:

Signal:	Follows Input
Connectors:	(8) 4-pin Mini-DIN Female
Video Impedance:	75 Ohms Y/C
Video Level:	Follows Input
Bandwidth:	60 MHz
Differential Gain:	<0.1%
Differential Phase:	<0.1 Degrees

CONTROL:

Connector:	(1) 9-pin D-Sub Female
Front Panel Keypad	
RS232 Controllable	

DISPLAYS:

Power On Indicator	
LCD Display Module	

PHYSICAL SPECIFICATIONS

DIMENSIONS:

	1U High, 1 Rack Wide
(in)	1.75 H x 17.00 W x 9.50 D
(cm)	4.45 H x 43.18 W x 24.13 D

ENCLOSURE:

Aluminum, Black, Texture Finish

WEIGHT:

Net:	5.4 lbs. / 2.45 kg
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POWER:

Input:	110 or 220 VAC, 60/50 Hz, Internal
Dissipated:	15.7 Watts

General Specifications (8x8) (Video)

AC180A

8 INPUT, 8 OUTPUT COMPOSITE VIDEO MATRIX SWITCH

INPUT:

Signal:	Composite Video
Connectors:	(9) BNC Female
Video Impedance:	75 Ohms
Video Level:	0.5 – 2.0 Vpp

OUTPUT:

Signal:	Follows Input
Connectors:	(8) BNC Female
Video Impedance:	75 Ohms
Video Level:	Follows Input
Bandwidth:	60 MHz
Differential Gain:	<0.1%
Differential Phase:	<0.1 Degrees

CONTROL:

Connector:	(1) 9-pin D-Sub Female
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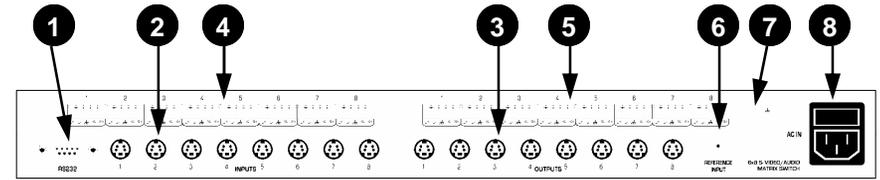
WEIGHT:

Net:	5.0 lbs. / 2.27 kg
------	--------------------

POWER:

Input:	110 or 220 VAC, 60/50 Hz, Internal
Dissipated:	11.5 Watts

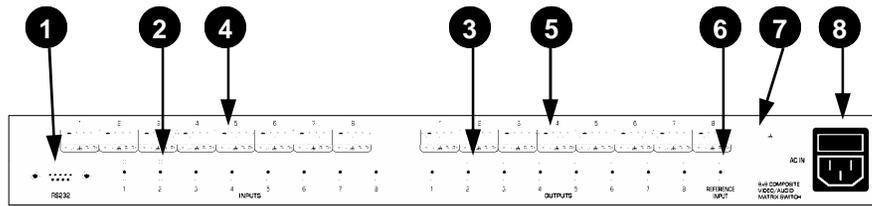
Panel Descriptions



AC182A REAR PANEL LAYOUT

- 1. RS232 INPUT:** DB-9 connector provided for controlling the unit using RS232 commands.
- 2. VIDEO INPUTS:** Eight 4-pin mini-din female connectors provided to connect to video sources.
- 3. VIDEO OUTPUTS:** Eight 4-pin mini-din female connectors provided to connect to a video displays.
- 4. AUDIO INPUTS:** Eight 3.50 mm 5 position terminal block connectors provided to connect to audio sources.
- 5. AUDIO OUTPUTS:** Eight 3.50 mm 5 position terminal block connectors provided to connect to audio amplifiers.
- 6. REFERENCE INPUT:** Provided for synchronized switching during the reference input sync pulse.
- 7. CHASSIS GROUND:** A tapped hole and a 4-40 screw is provided for chassis grounding purposes. If the grounding integrity of the rack screws is questionable, connect a wire from this screw to earth ground.
- 8. AC IN:** Power inlet accepts 110 VAC or 220 VAC, an internal voltage selector switch will be set according to your country standards prior to shipping.

Panel Descriptions



AC180A REAR PANEL LAYOUT

1. **RS232 INPUT:** DB-9 connector provided for controlling the unit using RS232 commands.
2. **VIDEO INPUTS:** Eight BNC female connectors provided to connect to video sources.
3. **VIDEO OUTPUTS:** Eight BNC female connectors provided to connect to video displays.
4. **AUDIO INPUTS:** Eight 3.50 mm 5 position terminal block connectors provided to connect to audio sources.
5. **AUDIO OUTPUTS:** Eight 3.50 mm 5 position terminal block connectors provided to connect to audio amplifiers.
6. **REFERENCE INPUT:** Provided for synchronized switching during the reference input sync pulse.
7. **CHASSIS GROUND:** A tapped hole and a 4-40 screw is provided for chassis grounding purposes. If the grounding integrity of the rack screws is questionable, connect a wire from this screw to earth ground.
8. **AC IN:** Power Inlet accepts 110 VAC or 220 VAC, an internal voltage selector switch will be set according to your country standards prior to shipping.

RS232 Control Using a PC, Example

In this example, a terminal emulation program on a PC was used to control the AC180A / AC182A. The settings for the PC were as follows:

9600 BAUD RATE
 NO PARITY BIT
 1 START BIT
 8 DATA BITS
 1 STOP BIT
 FLOW CONTROL Xon/Xoff
 ECHO CHARACTERS LOCALLY OFF

Below is a sample of the communication from the PC to the AC180A / AC182A. The boldface typing is not present when controlling the unit in this manner. It is used here only to illustrate what is happening.

```
>SW38$      ( connect input 3 to output 8, $ = good command )
[SWITCH INPUT: 3 TO OUTPUT: 8]
>SW#        ( 5 seconds has elapsed since receiving 'W', # = timeout )
>SW71$      ( connect input 7 to output 1, $ = good command )
[SWITCH INPUT: 7 TO OUTPUT: 1]
>SAV1$      ( save current configuration in preset location 1 )
[SAVING TO MEMORY PLEASE WAIT...]
[SAVED IN MEMORY LOCATION: 1]
>T003$      ( set time to 3 seconds for user scan mode )
[TIME SET TO: 0:03]
>OUT8$      ( set output to output 8 for user scan mode )
[OUTPUT SET TO: 8]
>INS3$      ( set number of inputs for user scan mode )
[INPUTS USED FOR SCANNING IS: 3]
>STU1$      ( store settings for user scan mode location 1 )
[SAVING TO MEMORY PLEASE WAIT...]
[SAVED IN MEMORY LOCATION: 1]
>RCU1$      ( recall user scan mode from location mode )
[READING MEMORY PLEASE WAIT...]
[SCANNING PRESET...]
>( unit in scan mode, upon receiving a character, ends scan mode )
[SCAN MODE OFF!]SW11$ ( connect input 1 to output 1 )
[SWITCH INPUT: 1 TO OUTPUT: 1]
>RCP1$      ( recall preset configuration stored in location 1 )
[READING MEMORY PLEASE WAIT...]
[PRESET LOCATION: 1 LOADED]
>
```

RS232 Messages

String Message 'POWER UP: USER'

- Applies after an INI command has been recognized.
- The unit will initialize to user preset '0' upon power up.

String Message 'TIME SET TO: *.*'

- Applies after a legal T*** command has been recognized.
- The unit will store the time set for scan modes into memory.
- The maximum time that can be entered is 4:00, the minimum time that can be entered is 0:01.

String Message 'OUTPUT SET TO: *'

- Applies after the OUT command has been recognized.
- The unit will store the output that will be used for user scan mode.

String Message 'INPUTS USED FOR SCANNING IS: *'

- Applies after the INS command has been recognized.
- The unit will store how many outputs will be used for user scan mode.

String Message 'SCANNING PRESET...'

- Applies after a RCU command has been recognized.
- The unit is scanning a user programmed scan sequence.

String Message 'SWITCH BOTH'

- Applies after the MF command has been recognized.
- The unit will switch both audio and video together.

String Message 'SWITCH AUDIO'

- Applies after the MA command has been recognized.
- The unit will switch audio only, leaving the video unchanged.

String Message 'SWITCH VIDEO'

- Applies after the MV command has been recognized.
- The unit will switch video only, leaving the audio unchanged.

Operational Setup

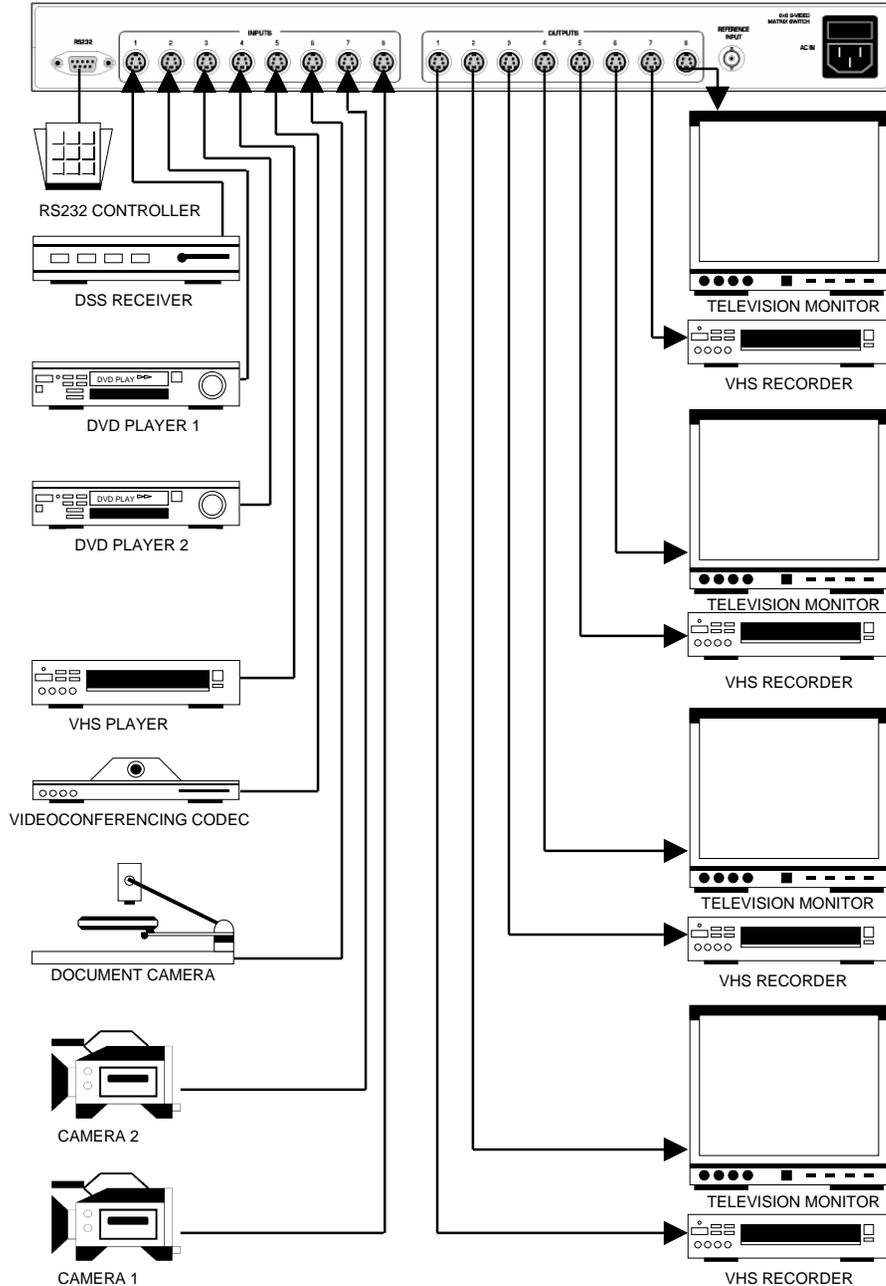
Turn off all equipment before connecting or removing cable connections.

1. Connect up to eight video sources to the inputs labeled 1 through 8.
2. Connect up to eight video displays to the outputs labeled 1 through 8.
3. To control the unit using a computer, the AC180A / AC182A RS232 port must be connected to the computers serial port.
4. Power up the unit and check that the power LED indicator is lit green.
5. The LCD module should display the following:

OUTPUT:	1	2	3	4	5	6	7	8
INPUT:	1	2	3	4	5	6	7	8

This indicates that input 1 is connected to output 1, input 2 is connected to output 2, etc. The display numbers represent the inputs, the numbers above the LCD readout on the label represent the output.

Typical Configuration



RS232 Messages

String Message 'SAVED IN MEMORY LOCATION: *'

- Applies after a save command has been recognized.
- The unit is done saving a preset into memory.

String Message 'READING MEMORY PLEASE WAIT...'

- Applies after a recall command has been recognized.
- The unit is reading a memory location.

String Message 'PRESET LOCATION: * LOADED'

- Applies after a recall command has been recognized.
- The unit has finished loading a preset from memory.

String Message 'SCANNING ALL OUTPUTS...'

- Applies after the SCAL command has been recognized.
- The unit is in scan mode and scanning each input to all outputs.

String Message 'SCAN MODE OFF!'

- Applies after the unit is in scan mode and a character has been received.
- The unit will cease scan mode when an ASCII character is received.

String Message 'SCANNING INPUTS TO OUTPUT...'

- Applies after the SCIN command has been recognized.
- The unit is in scan mode and scanning each input to each individual output.

String Message 'DELETING PRESET: *'

- Applies after the DLP command has been recognized.
- The unit is erasing a preset from memory.

String Message 'VERSIONS HW *.* SW *.*'

- Applies after the VERS command has been recognized.
- The unit displays the current hardware and software versions.

String Message 'POWER UP: DEFAULT'

- Applies after an INI command has been recognized.
- The unit will initialize to the factory default configuration upon power up.

RS232 Messages

The AC180A / AC182A RS232 routine sends feedback messages to the user. Each character typed is echoed back to the terminal. Some of the messages provide helpful information when using the AC180A / AC182A. String messages are enclosed in square brackets `]`.

Character Message '\$' — Good Command

- Applies after a good command is received.
- Sent after an [Enter] key has been pressed.

Character Message '?' — Unknown Command

- Applies after an unrecognized command.
- Sent after an [Enter] key or a full command buffer.

Character Message '#' — Timeout has Occurred

- After receiving a character, if another character is not received in 5 seconds, a timeout occurs.
- Sent after 5 seconds has expired between characters.
- A new command prompt will appear after the timeout message.

After an unknown command, the unit will return a prompt on a new line. After this message, the PC command must be reentered from the beginning.

String Message 'SWITCH INPUT: * TO OUTPUT: *'

- Applies after a complete switch command has been recognized.
- An input to output connection has been made.

String Message 'SAVING TO MEMORY PLEASE WAIT...'

- Applies after a complete save command has been recognized.
- The unit is saving a preset into memory.

String Message '12345678'

- Applies after a complete status update command has been recognized.
- The unit returns the current switch matrix configuration.

User Instructions

When the unit is first powered on, the LCD Display Module should display the following:

OUTPUT: 1 2 3 4 5 6 7 8
INPUT: 1 2 3 4 5 6 7 8

The numbers on the LCD module indicate the inputs. The label above the LCD Module represents the outputs. Therefore, input 1 is connected to output 1, input 2 is connected to output 2, etc.

Keypad Control

Use the keypad to switch, store, recall, and program presets into the unit. There is a 5 second timeout between key presses. If a timeout occurs, the display will show an error message for 2 seconds, then return to the previous state.

LCD Display

FORMAT ERROR!

Switching

To connect an input to an output, perform the following sequence of key presses:

Example: Input 8 to Output 1

Key

LCD Display

In

IN:

8

IN: 8

Out

IN: 8 OUT:

1

IN: 8 OUT: 1

↩

8 2 3 4 5 6 7 8

At this point the display updates the current settings to show that input 8 is now connected to output 1.

User Instructions

Save Preset

There are ten (10) available memory presets, 0-9, to store the current configuration setting for later use.

Example: Store current configuration into Preset 2.

Key	LCD Module
	IN:
	SAVE SETTING: #
	SAVE SETTING: 2
	SAVING...

When done saving the display will return to the previous state.

8 2 3 4 5 6 7 8

Now, preset 2 holds this setting and can be recalled at a later time.

Recall Preset

To recall a saved preset, perform the following sequence of key presses:

Example: Recall stored configuration from Preset 2.

Key	LCD Module
	OUT:
	MEMORY RECALL: ?
	MEMORY RECALL: 2
	READING MEMORY..

After reading the memory, the display will show the loaded configuration.

8 2 3 4 5 6 7 8

RS232 Commands

14. Power Up Initialization

This command will set the unit to either boot-up to user stored preset '0' or the factory default.

NOTE: If USER is chosen, the unit will bring up the PRESET stored in LOCATION 0 only!!

FORMAT:
PC COMMAND: INI(setting)(Enter)
HEX EQUIVALENT: [49][4E][49][setting][0D]

Format for (setting): ASCII characters 1-2,
Hex Equivalents [31]-[32]

Chose '1' for factory default.
Chose '2' for user preset 0.

15. Switch Both Audio and Video

This command will set the unit to switch both audio and video simultaneously. This is the default setting.

FORMAT:
PC COMMAND: MF(Enter)
HEX EQUIVALENT: [4D][46][0D]

16. Switch Audio Only

This command will set the unit mode to switch audio only and leave the video unchanged.

FORMAT:
PC COMMAND: MA(Enter)
HEX EQUIVALENT: [4D][41][0D]

17. Switch Video Only

This command will set the unit mode to switch video only and leave the audio unchanged.

FORMAT:
PC COMMAND: MV(Enter)
HEX EQUIVALENT: [4D][56][0D]

RS232 Commands

10. Save User Scan

This command will store a scan sequence programmed by the user.
Set the time for the scan using the '**Set Time**' command.
Set the output using the '**Set Output**' command.
Set the number of inputs to scan using the '**Set Number of Inputs**' command. After this is complete, store the settings using the '**Save User Scan**' command.

FORMAT:
PC COMMAND: STU(location)(Enter)
HEX EQUIVALENT: [53][54][55][location][0D]

Format for (location): ASCII characters 0-9,
Hex Equivalents [30]-[39]

11. Recall User Scan

This command will recall a stored scan sequence programmed and stored previously by the user.

FORMAT:
PC COMMAND: RCU(location)(Enter)
HEX EQUIVALENT: [52][43][55][location][0D]

Format for (location): ASCII characters 0-9,
Hex Equivalents [30]-[39]

12. Versions

This command will show the versions of both the hardware and software.

FORMAT:
PC COMMAND: VERS(Enter)
HEX EQUIVALENT: [56][45][52][53][0D]

13. Status Update

This command will report the input-to-output configuration of the matrix.

FORMAT:
PC COMMAND: .(Enter)
HEX EQUIVALENT: [2E][0D]

User Instructions

Delete Preset

To erase a preset from memory, perform the following sequence of key presses:

Example: Delete Preset 2.

Key	LCD Display
	DELETE PRESET ?
	DELETE PRESET #
	DELETE PRESET 2
	DELETING PRESET

After deleting the preset, the display will return to the previous configuration.

8 2 3 4 5 6 7 8

Scan All Inputs

This will connect each individual input to all outputs occurring at time intervals from 1 second to 4 minutes. To scan all inputs perform the following sequence of key presses:

Example: 3 seconds between switches.

Key	LCD Display
	SCAN ALL MODE ?
	ENTER TIME: 0:00
	ENTER TIME: 0:03
	1 1 1 1 1 1 1 1

The unit has begun scanning and will increment the input every 3 seconds. When the 8th input is reached, the unit will roll over to input 1 and continue the process until a key is pressed to stop scan mode.

User Instructions

Press any key to stop scanning.

Key LCD Display

1 SCAN MODE OFF!

The unit will stop at the last switch. For example:

4 4 4 4 4 4 4 4

Scan Inputs

This scan mode will connect each input to each output individually. Input 1 will be connected to output 1 for the time period entered, then input 2 will be connected to output 1. This continues until input 8 is connected to output 1, then input 1 will be connected to output 2, etc. The scanning continues until a key is pressed to end scan mode. To scan inputs, perform the following sequence of key presses:

Example: 3 seconds between switches.

Key LCD Display

8 SCAN INPUTS ?

↶ ENTER TIME: 0:00

3 ENTER TIME: 0:03

↶ 1 4 4 4 4 4 4 4

The unit updated the first position, which represents output 1. This will continue to update until scan mode is stopped. The pattern is as follows:

Time	Input	connected to	Output
3 secs.	1		1
3 secs.	2		1
3 secs.	3		1
3 secs.	4		1
3 secs.	5		1
3 secs.	6		1
3 secs.	7		1
3 secs.	8		1

RS232 Commands

7. Delete Preset

This command will erase a saved preset from memory.

FORMAT:

PC COMMAND: DLP(location)(Enter)

HEX EQUIVALENT: [44][4C][50][location][0D]

Format for (location): ASCII characters 0-9,
Hex Equivalents [30]-[39]

8. Set Output

This command will tell what output to route the inputs during user scan mode.

FORMAT:

PC COMMAND: OUT(output)(Enter)

HEX EQUIVALENT: [4F][55][54][output][0D]

Format for (output): ASCII characters 1-8,
Hex Equivalents [31]-[38]

9. Set Number of Inputs

This command will tell how many inputs to scan through during user scan mode.

FORMAT:

PC COMMAND: INS(inputs)(Enter)

HEX EQUIVALENT: [49][4E][53][inputs][0D]

Format for (inputs): ASCII characters 0-8,
Hex Equivalents [30]-[38]

Choose input '0' for a video blank.

RS232 Commands

4. Set Time

This command sets the video hold time between switching for scan modes.

FORMAT:

PC COMMAND: T(minutes)(hsecs)(lsecs)(Enter)

HEX EQUIVALENT: [54][minutes][hsecs][lsecs][0D]

Format for (minutes): ASCII characters 0-4,
Hex Equivalents [30]-[34]

Format for (hsecs): ASCII characters 0-5,
Hex Equivalents [30]-[35]

Format for (lsecs): ASCII characters 0-9,
Hex Equivalents [30]-[39]

Time should be entered as minutes and seconds. Maximum time allowed is 4 minutes, minimum time is 1 second. It is illegal to enter more than 59 seconds.

5. Scan Inputs to All Outputs

This command makes the unit route each input to all outputs holding each input on for the duration of the time chosen by the Time Set command. It will scan inputs 1 through 8 then back to input 1 and continue until a new character is sent to the unit and stops scan mode.

FORMAT:

PC COMMAND: SCAL(Enter)

HEX EQUIVALENT: [53][43][41][4C][0D]

6. Scan Inputs to an Output

This command makes the unit route each input one at a time to an output. After input 8 is routed to output 1, the next connection will be input 1 to output 2. This pattern continues until a new character is sent to the unit and stops the scan mode.

FORMAT:

PC COMMAND: SCIN(Enter)

HEX EQUIVALENT: [53][43][49][4E][0D]

User Instructions

Time	Input	connected to	Output
3 secs.	1		2
3 secs.	2		2
3 secs.	3		2
3 secs.	4		2
3 secs.	5		2
3 secs.	6		2
3 secs.	7		2
3 secs.	8		2

Press any key to stop the scan mode.

Key	LCD Display
	

The display will stop wherever it is in scan mode, for example:



Store User Scan Preset

This is a scan mode programmable by the user. There are ten (10) available user scan presets. This saves the number of inputs to scan, the time between switches, and the output to connect the inputs. To store a user scan preset, perform the following sequence of key presses.

Example: Scan Inputs, 1 through 4
Connect to Output 5
Switch every 1 minute
Store in Preset 2

Key	LCD Display
	
	

User Instructions

Key	LCD Display
1	ENTER TIME: 0:01
0	ENTER TIME: 0:10
0	ENTER TIME: 1:00
↶	SELECT OUTPUT:
5	SELECT OUTPUT: 5
↶	# OF INPUTS: ?
4	# OF INPUTS: 4
↶	MEMORY POS #: ?
2	MEMORY POS #: 2
↶	SAVING...

After saving the scan preset into memory, the display will return to the previous configuration.

8 8 1 4 4 4 4 4

Now, preset 2 holds this scan preset and can be recalled at a later time.

User Scan Recall

To recall a saved user scan preset, perform the following sequence of key presses.

Example: Recall user scan preset 2.

RS232 Commands

1. Switch Video Input to Output

This command connects an input to an output.

FORMAT:
PC COMMAND: SW(input)(output)(Enter)
HEX EQUIVALENT: [53][57][input][output][0D]

Format for (input): ASCII characters 0-8,
Hex Equivalents [30]-[38]
Format for (output): ASCII characters 1-8,
Hex Equivalents [31]-[38]

Choose input '0' for a video blank.

2. Save Preset

This command saves the current matrix configuration into memory.

FORMAT:
PC COMMAND: SAV(location)(Enter)
HEX EQUIVALENT: [53][41][56][0D]

Format for (location): ASCII characters 0-9,
Hex Equivalents [30]-[39]

3. Recall Preset

This command recalls a saved preset from memory.

FORMAT:
PC COMMAND: RCP(location)(Enter)
HEX EQUIVALENT: [52][43][50][0D]

Format for (location): ASCII characters 0-9,
Hex Equivalents [30]-[39]

RS232 Interface Program

RS232 Description

The RS232 port on the AC180A / AC182A is a DB-9 pin female connector. The interface cable is a standard straight through DB-9 cable with a male end and a female end. Communication from a PC to the AC180A / AC182A is possible provided the PC has terminal emulation software such as HyperTerminal for Windows 95/98/2000.

AC180A / AC182A DB-9 Female Connector Pinout

- PIN 2 **Transmit**, Output from AC180A / AC182A
(Receive on Terminal Side)
- PIN 3 **Receive**, Input from AC180A / AC182A
(Transmit on Terminal Side)
- PIN 5 **Ground**
ALL OTHER PINS NOT CONNECTED

Communication Parameters

ASYNCHRONOUS
SERIAL
9600 BAUD RATE
NO PARITY BIT
1 START BIT
8 DATA BITS
1 STOP BIT

User Instructions

Key	LCD Display
	SCAN USER SEQ ?
	RECALL SCAN #: ?
	RECALL SCAN #: 2
	READING MEMORY..

After reading the memory location, the unit will be in scan mode. The display will show the current configuration and start scan sequencing.

8 8 1 4 1 4 4 4

It will scan input 1 through input 4 connecting to output 5 and switching every minute. When input 4 is connected, on the next switch, input 1 will be connected to output 5 and continues until a key is pressed to end scan mode.

Key	LCD Display
	SCAN MODE OFF!

Versions

To display the versions of the hardware and the software of the unit, perform the following sequence of key presses.

Key	LCD Display
	VERSIONS HW/SW ?
	HW 1.0 SW 1.0

The display will show the versions for approximately 2 seconds then return to the previous configuration.

8 8 1 4 2 4 4 4

User Instructions

Initialize To User or Default

It is possible to set the unit to load Preset 0 or factory default. If the user has not saved a configuration in Preset 0, it will load up the factory default. To tell the unit to load Preset 0 upon power up, perform the following sequence of key presses.

Example: Power up User.

Key	LCD Display
	POWER UP INIT ?
	PWR 1:DFT 2:USR
	POWER UP USER
	8 8 1 4 2 4 4 4

The next time the unit powers up, it will load Preset 0. If factory DEFAULT is chosen, the unit will load the factory preset upon power up.

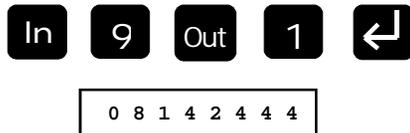
Video Blanking

For a video blank, chose input 9 for the input.

Example: Video Blank output 1.

Key sequence would be:

This will blank output 1.
A '0' will appear as the input.



Memory Location '0'

To store a preset in location '0', use the "In" key to represent '0'.

Example: Store current configuration in Preset 0.

Key sequence would be:



User Instructions

Change Switch Mode

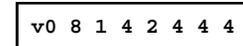
To change the switch mode of the unit to switch audio only, video only, or both simultaneously use the following set of key presses.

Example: Switch Audio Only.

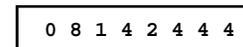
Key	LCD Display
	SET SWITCH MODE?
	1:A&V 2:A 3:V
	SWITCH MODE: AUD
	a0 8 1 4 2 4 4 4

The LCD module will show a lower case 'a' in the far left position of the screen. Any switching will only effect the audio matrix only.

The LCD module will show a lower case 'v' in the far left position of the screen if switch mode is video only.



If the switch mode is in both audio and video, the LCD module will have no letter showing on the screen.



When switching from audio only, or video only, back to simultaneous audio and video switching, the unit will reinitialize so both audio and video inputs and outputs are matched.

