

## Section D - Commands

The Peak series of matrices have a number of commands for control and query to allow full control. Each command is listed in this section with a description and example to help understand the commands.

The following commands are available:

### Audio Routing and Status

MXxxAii00 .....	audio input to output .....	A4
MXxxAii01,o2,o3,o4,o5,o6,o7,o8 .....	audio input to multiple outputs .....	A4
MXxxAAii .....	audio input to all outputs .....	A4
MXxxABooyy .....	balance .....	A4
MXxxABAy .....	balance for all outputs .....	A4
MXxxAFoo .....	audio output off .....	A5
MXxxAMoo .....	audio mute (on, off, toggle) .....	A5
MXxxAPiiyy .....	Sensitivity .....	A5
MXxxAPAy .....	all inputs to sensitivity yy .....	A5
MXxxAUooyy .....	Volume to a particular .....	A5
MXxxAUAy .....	all outputs to volume level yy .....	A6
MXxxAYoo .....	Volume step up .....	A6
MXxxAZoo .....	Volume step down .....	A6
MXxxSA(oo) .....	status of audio route (s) .....	A6
MXxxSAA .....	status of all audio items .....	
MXxxSAB(oo) .....	status of audio balance(s) .....	
MXxxSAM(oo) .....	status of of audio mute(s) .....	
MXxxSAP(ii) .....	status of sensitivity level(s) .....	
MXxxSAU(oo) .....	status of volume level(s) .....	
MXxxZ50ooyy .....	set maximum volume for output .....	
MXxxZ51 .....	read all maximum volume settings .....	
MXxxZ57y .....	set volume enable .....	
MXxxZ58 .....	read volume enable .....	
MXxxZ59y .....	set sensitivity enable .....	
MXxxZ60 .....	read sensitivity enable .....	

### Video Routing and Status

MXxxViio0 .....	Video input to output .....	
MXxxViio1,o2,o3,o4,o5,o6,o7,o8 .....	video input to multiple outputs .....	
MXxxVFoo .....	video output off .....	
MXxxVAii .....	route video input to all outputs .....	
MXxxSV(oo) .....	status of video route(s) .....	

### Digital Audio Routing and Status

MXxxDiio0 .....	Digital input to output .....	
MXxxDiio1,o2,o3,o4,o5,o6,o7,o8 .....	input to multiple outputs .....	
MXxxDAii .....	send Digital input to all .....	
MXxxDFoo .....	Digital output off .....	
MXxxSD(oo) .....	status of digital route(s) .....	

### Audio/Video/Digital Routing and Status

MXxxBiio0 .....	A/D/V input to output .....	
MXxxBiio1,o2,o3,o4,o5,o6,o7,o8 .....	input to multiple outputs .....	
MXxxBAii .....	send A/D/V input to all .....	
MXxxBFoo .....	A/D/V output off .....	
MXxxBS .....	A/D/V straight through .....	
MXxxSB(oo) .....	status of A/D/V route(s) .....	

## General Status

MXxxS ..... all status returned

## Configuration Commands

MXxxZ01 ..... read audio inputs  
MXxxZ02 ..... read video inputs  
MXxxZ03 ..... read audeo outputs  
MXxxZ04 ..... read video outputs  
MXxxZ05 ..... read option flags  
MXxxZ06 ..... read hardware type (model number)  
MXxxZ07 ..... read hardware code  
MXxxZ08 ..... read hardware revision  
MXxxZ09 ..... read software revision  
MXxxZ10 ..... read serial number  
MXxxZ11 ..... read mfg date  
MXxxZ13 ..... set/read enable/disable front panel control  
MXxxZ17 ..... set/read volume mode  
MXxxZ18 ..... set/read mute release mode  
MXxxZ21 ..... set/read response mode  
MXxxZ53 ..... Set/Read select digital with analog  
MXxxZ54 ..... Set/Read select digital with video

## IR Teaching Commands

MXxxZ52 ..... Teach IR code  
MXxxZ56vv..... Set/read number of times to repeat on IR teaching

## Preset Commands

MXxxZ23yy..... set preset name  
MXxxZ24yy..... read preset name  
MXxxZ25yy..... clear preset name  
MXxxZ26xxyyiioo ..... set audio preset  
MXxxZ27xxyy ..... read audio preset  
MXxxZ28xxyy ..... clear audio preset  
MXxxZ29xxyyiioo ..... set digital preset  
MXxxZ30xxyy ..... read digital preset  
MXxxZ31xxyy ..... clear digital preset  
MXxxZ32xxyyiioo ..... set video preset  
MXxxZ33xxyy ..... read video preset  
MXxxZ34xxyy ..... clear video preset  
MXxxZ35xxyyiioo ..... set A/D/V preset  
MXxxZ36xxyy ..... read A/D/V preset  
MXxxZ37xxyy ..... clear A/D/V preset  
MXxxZ38xxyyiioo ..... set volume Preset  
MXxxZ39iioo..... read volume Preset  
MXxxZ40ooyy..... clear volume Preset  
MXxxZ41xxyyiioo ..... set balance Preset  
MXxxZ42iioo..... read balance Preset  
MXxxZ43ooyy..... clear balance Preset  
MXxxZ44xxyyiioo ..... set Sensitivity Preset  
MXxxZ45ooyy..... read Sensitivity Preset  
MXxxZ46ooyy..... clear Sensitivity Preset  
MXxxZ47pp ..... Save current setup as preset no. pp  
MXxxZ48xx..... read complete preset  
MXxxZ49xx..... run preset number xx

MXxxZ98 ..... reset unit  
MXxxZ99 ..... search for unit

Legend:

xx = unit ID number 00 to 15  
 ii = input number 00 to 64  
 oo = output number 01 to 64  
 yy = value to set

# Audio Routing Commands

<b>MXxxAiioo&lt;CR&gt;</b>	
Route an audio input to an audio output	MX00A0103<CR>
	Routes audio input 1 to output 3
<b>Response: MXxx-Audio=ii to oo&lt;CR&gt;</b>	

<b>MXxxAio1,o2,o3,o4,o5,o6,o7,o8&lt;CR&gt;</b>	
Route an audio input to as many as 10 outputs	MX00A0101,02,03,04,05,06,07,08,09,10<CR>
	Routes audio input 1 to outputs 1 to 8
	MX00A0101,02,03,04<CR>
	Routes audio input 1 to outputs 1 to 4
<b>Response: MXxx-Audio=ii to oo&lt;CR&gt;</b> (for each route made)	

<b>MXxxAAii&lt;CR&gt;</b>	
Routes an audio input to all outputs	MX00AA02<CR>
	Routes audio input 2 to all audio outputs
<b>Response: MXxx-Audio=ii to oo&lt;CR&gt;</b> (for each route made)	

<b>MXxxABooyy&lt;CR&gt;</b>	
Sets a balance level for an output	MX00AB0249<CR>
yy=00 for full left yy=49 for center yy=99 full right	Output 2 is set for equal balance between left and right channels.
<b>Response: MXxx-Balance oo set to yy&lt;CR&gt;</b>	

<b>MXxxAFoo&lt;CR&gt;</b>	
Turn an audio output off	MX00AF03<CR>
	Turn off audio output number 3
<b>Response: MXxx-Audio=00 to oo&lt;CR&gt;</b>	

<b>MXxxAMoo(y)&lt;CR&gt;</b>	
Mute an audio output	MX00AM03<CR>
absence of (y) will result in a toggle of the mute adding (y) is optional for setting a mute directly y = 0 turns off the mute for the output y = 1 turn on the mute for the output	Toggle the mute of output 3
	MX00AM021<CR>
	Enables the mute for output 2
<b>Response: MXxx-Audio=00 to oo&lt;CR&gt;</b> (for each route made)	

<b>MXxxAPIiyy&lt;CR&gt;</b>	
Set the level adjustment for an audio input	MX00AP0132<CR>
yy = 00 to 48 yy = 32 for 0dB pass yy adjusts in 0.5dB steps	Sets audio input 1 to 0dB pass
<b>Response: MXxx-Sensitivity ii set to yy&lt;CR&gt;</b>	

<b>MXxxAPAyy&lt;CR&gt;</b>	
Set the level adjustment for all audio inputs	MX00APA32<CR>
yy = 00 to 48 yy = 32 for 0dB pass yy adjusts in 0.5dB steps	Sets all audio inputs to 0dB pass
<b>Response: MXxx-Sensitivity ii set to yy&lt;CR&gt;</b> (for each input changed)	

<b>MXxxAUooyy&lt;CR&gt;</b>	
Sets an audio output volume level	MX00AU0132<CR>
yy = 00 (-64dB Minimum) yy = 32 (0dB Pass Through) yy = 48 (+32dB Maximum)	Sets audio output 1 to 0dB pass
<b>Response: MXxx-Volume oo to yy&lt;CR&gt;</b>	

<b>MXxxAUAyy&lt;CR&gt;</b>	
Sets all audio outputs to a volume level	MX00AUA32<CR>
yy = 00 (-64dB Minimum) yy = 32 (0dB Pass Through) yy = 48 (+32dB Maximum)	Sets all audio outputs 1 to 0dB pass
<b>Response: MXxx-Volume oo to yy&lt;CR&gt;</b> (for each output changed)	

<b>MXxxAYoo&lt;CR&gt;</b>	
Step an audio output volume up one level	MX00AY03<CR>
	Step up audio output number 3 up one step
<b>Response: MXxx-Volume oo to yy&lt;CR&gt;</b>	

<b>MXxxAZoo&lt;CR&gt;</b>	
Step an audio output volume down one level	MX00AY03<CR>
	Step down audio output number 3 up one step
<b>Response: MXxx-Volume oo to yy&lt;CR&gt;</b>	

<b>MXxxSA(oo)&lt;CR&gt;</b>	
Query for the status of an audio route.	MX00SA<CR>
	Returns the status of all the audio routes
	MX00SA04<CR>
	Returns the routing status of audio output number 4
<b>Response: MXxx-Audio=ii to oo&lt;CR&gt;</b> (each output will be sent if output number not specified)	

<b>MXxxSAB(oo)&lt;CR&gt;</b>	
Query for the status of an audio output balance	MX00SAB<CR>
	Returns the balance status of all the audio outputs
	MX00SAB04<CR>
	Returns the balance status of audio output number 4
<b>Response: MXxx-Balance oo set to yy&lt;CR&gt;</b> (each output will be sent if output number not specified)	

<b>MXxxSAM(oo)&lt;CR&gt;</b>	
Query for the mute status of an audio output	MX00SAM<CR>
	Returns the mute status of all the audio outputs
	MX00SAM04<CR>
	Returns the mute status of audio output number 4
<b>Response: MX00-Output 01 is Muted&lt;CR&gt;</b> (each output will be sent if output number not specified)	

<b>MXxxSAP(oo)&lt;CR&gt;</b>	
Query for the status of an audio input level	MX00SAP<CR>
	Returns the level of all the audio inputs
	MX00SAP04<CR>
	Returns the level of audio input number 4
<b>Response: MXxx-Sensitivity ii set to yy&lt;CR&gt;</b> (each input will be sent if input number not specified)	

<b>MXxxSAU(oo)&lt;CR&gt;</b>	
Query for the status of an audio output volume	MX00SAP<CR>
	Returns the volume of all the audio outputs
	MX00SAP04<CR>
	Returns the volume of audio output number 4
<b>Response: MXxx-Volume oo to yy&lt;CR&gt;</b> (each output will be sent if output number not specified)	

<b>MXxxZ50ooyy&lt;CR&gt;</b>	
Set the maximum volume level for an output	MX00Z500432<CR>
yy=00 to 48	Set the maximum volume for output 4 to 32
<b>Response: MXxx-Max Out Level for oo = yy&lt;CR&gt;</b>	

<b>MXxxZ51&lt;CR&gt;</b>	
Read the maximum volume level for all outputs	MX00Z51<CR>
	Read all output maximum volume levels
<b>Response: MXxx-Max Out Level for oo = yy&lt;CR&gt;</b> (each output will be sent)	

<b>MXxxZ57y&lt;CR&gt;</b>	
Enable/Disable volume control	MX00Z570<CR>
y=0 to disable volume control	Disable volume control in the matrix
y=1 to enable volume control	
	MX00Z571<CR>
	Enable volume control in the matrix
<b>Response: MXxx-Volume control enabled&lt;CR&gt;</b>	
<b>Response: MXxx-Volume control disabled&lt;CR&gt;</b>	

<b>MXxxZ58&lt;CR&gt;</b>	
Read volume control enable/disable status	MX00Z58<CR>
	Get the status of volume control ability
<b>Response: MXxx-Volume control enabled&lt;CR&gt;</b>	
<b>Response: MXxx-Volume control disabled&lt;CR&gt;</b>	

<b>MXxxZ59y&lt;CR&gt;</b>	
Enable/Disable sensitivity control	MX00Z590<CR>
y=0 to disable sensitivity control	Disable sensitivity control in the matrix
y=1 to enable sensitivity control	
	MX00Z591<CR>
	Enable sensitivity control in the matrix
<b>Response: MXxx-Sensitivity control enabled&lt;CR&gt;</b>	
<b>Response: MXxx-Sensitivity control disabled&lt;CR&gt;</b>	

<b>MXxxZ60&lt;CR&gt;</b>	
Read sensitivity control enable/disable status	MX00Z60<CR>
	Get the status of sensitivity control ability
<b>Response: MXxx-Sensitivity control enabled&lt;CR&gt;</b>	
<b>Response: MXxx-Sensitivity control disabled&lt;CR&gt;</b>	

## Video Routing Commands

<b>MXxxViio&lt;CR&gt;</b>	
Route a video input to an video output	MX00V0103<CR>
	Routes video input 1 to output 3
<b>Response: MXxx-Video=ii to oo&lt;CR&gt;</b>	

<b>MXxxViio1,o2,o3,o4,o5,o6,o7,o8,o9,o10&lt;CR&gt;</b>	
Route an video input to as many as 10 outputs	MX00V0101,02,03,04,05,06,07,08,09,10<CR>
	Routes video input 1 to outputs 1 to 10
	MX00V0101,02,03,04<CR>
	Routes video input 1 to outputs 1 to 4
<b>Response: MXxx-Video=ii to oo&lt;CR&gt;</b> (for each route made)	

<b>MXxxVAii&lt;CR&gt;</b>	
Routes a video input to all outputs	MX00VA02<CR>
	Routes video input 2 to all video outputs
<b>Response: MXxx-Video=ii to oo&lt;CR&gt;</b> (for each route made)	

<b>MXxxVFoo&lt;CR&gt;</b>	
Turn a video output off	MX00VF03<CR>
	Turn off video output number 3
<b>Response: MXxx-Video=00 to oo&lt;CR&gt;</b>	

<b>MXxxSV(oo)&lt;CR&gt;</b>	
Query for the status of a video route.	MX00SV<CR>
	Returns the status of all the video routes
	MX00SV04<CR>
	Returns the routing status of video output number 4
<b>Response: MXxx-Video=ii to oo&lt;CR&gt;</b> (each output will be sent if output number not specified)	

# Digital Routing Commands

<b>MXxxDiio&lt;CR&gt;</b>	
Route an digital input to an a/v output	MX00D0103<CR>
	Routes digital input 1 to output 3
<b>Response: MXxx-Digital=ii to oo&lt;CR&gt;</b>	

<b>MXxxDiio1,o2,o3,o4,o5,o6,o7,o8,o9,o10&lt;CR&gt;</b>	
Route an digital input to as many as 10 outputs	MX00D0101,02,03,04,05,06,07,08,09,10<CR>
	Routes digital input 1 to outputs 1 to 10
	MX00D0101,02,03,04<CR>
	Routes digital input 1 to outputs 1 to 4
<b>Response: MXxx-Digital=ii to oo&lt;CR&gt;</b> (for each route made)	

<b>MXxxDAii&lt;CR&gt;</b>	
Routes an a/v input to all outputs	MX00DA02<CR>
	Routes digital input 2 to all digital outputs
<b>Response: MXxx-Digital=ii to oo&lt;CR&gt;</b> (for each route made)	

<b>MXxxDFoo&lt;CR&gt;</b>	
Turn an digital output off	MX00DF03<CR>
	Turn off digital output number 3
<b>Response: MXxx-Digital=00 to oo&lt;CR&gt;</b>	

<b>MXxxSD(oo)&lt;CR&gt;</b>	
Query for the status of an digital route.	MX00SD<CR>
	Returns the status of all the digital routes
	MX00SD04<CR>
	Returns the routing status of digital output number 4
<b>Response: MXxx-Digital=ii to oo&lt;CR&gt;</b> (each output will be sent if output number not specified)	

<b>MXxxZ53(y)&lt;CR&gt;</b>	
Set/Read select digital with analog	MX00Z530<CR>
y = 0 digital will not switch with analog audio	Disconnect digital from routing with analog audio
y = 1 digital will switch with analog audio	
if y is not used the current setting will be returned	
<b>Response: MXxx-Digital will not switch with audio&lt;CR&gt;</b>	

<b>MXxxZ54(y)&lt;CR&gt;</b>	
Set/Read select digital with video	MX00Z541<CR>
y = 0 digital will not switch with video	Disconnect digital from routing with video
y = 1 digital will switch with video	
if y is not used the current setting will be returned	
<b>Response: MXxx-Digital will switch with video&lt;CR&gt;</b>	

## A/V Routing Commands

<b>MXxxBiio&lt;CR&gt;</b>	
Route an a/v input to an a/v output	MX00B0103<CR>
	Routes a/v input 1 to output 3
<b>Response: MXxx-A/V=ii to oo&lt;CR&gt;</b>	

<b>MXxxBii01,o2,o3,o4,o5,o6,o7,o8,o9,o10&lt;CR&gt;</b>	
Route an a/v input to as many as 10 outputs	MX00B0101,02,03,04,05,06,07,08,09,10<CR>
	Routes a/v input 1 to outputs 1 to 10
	MX00B0101,02,03,04<CR>
	Routes a/v input 1 to outputs 1 to 4
<b>Response: MXxx-A/V=ii to oo&lt;CR&gt;</b> (for each route made)	

<b>MXxxBAii&lt;CR&gt;</b>	
Routes an a/v input to all outputs	MX00BA02<CR>
	Routes a/v input 2 to all video outputs
<b>Response: MXxx-A/V=ii to oo&lt;CR&gt;</b> (for each route made)	

<b>MXxxBFoo&lt;CR&gt;</b>	
Turn an a/v output off	MX00BF03<CR>
	Turn off a/v output number 3
<b>Response: MXxx-A/V=00 to oo&lt;CR&gt;</b>	

<b>MXxxSB(oo)&lt;CR&gt;</b>	
Query for the status of an a/v route.	MX00SB<CR>
	Returns the status of all the a/v routes
	MX00SB04<CR>
	Returns the routing status of a/v output number 4
<b>Response: MXxx-A/V=ii to oo&lt;CR&gt;</b> (each output will be sent if output number not specified)	

# Configuration Commands

MXxxZ01<CR>	
Query how many audio inputs installed	MX00Z01<CR>
	Query how many audio inputs are installed
<b>Response: MXxx-Audio inputs = yy&lt;CR&gt;</b>	

MXxxZ02<CR>	
Query how many video inputs installed	MX00Z02<CR>
	Query how many video inputs are installed
<b>Response: MXxx-Video inputs = yy&lt;CR&gt;</b>	

MXxxZ03<CR>	
Query how many audio outputs installed	MX00Z03<CR>
	Query how many audio outputs are installed
<b>Response: MXxx-Audio outputs = yy&lt;CR&gt;</b>	

MXxxZ04<CR>	
Query how many video outputs installed	MX00Z04<CR>
	Query how many video outputs are installed
<b>Response: MXxx-Video outputs = yy&lt;CR&gt;</b>	

MXxxZ06<CR>	
Query matrix model number	MX00Z06<CR>
	Query for the model number of the matrix
<b>Response: MXxx-Model No. = MX-0808NAD/R&lt;CR&gt;</b>	

MXxxZ07<CR>	
Query for the matrix hardware level	MX00Z07<CR>
	Query for the hardware level in the matrix
<b>Response: MXxx-Hardware Code = MTX-1616-B&lt;CR&gt;</b>	

<b>MXxxZ08&lt;CR&gt;</b>	
Query matrix hardware revision level	MX00Z08<CR>
	Query how many video outputs are installed
<b>Response: MXxx-Hardware revision = 1.000&lt;CR&gt;</b>	

<b>MXxxZ09&lt;CR&gt;</b>	
Query for the matrix software revision level	MX00Z09<CR>
	Query for the software level in the matrix
<b>Response: MXxx-Software revision = 1.000&lt;CR&gt;</b>	

<b>MXxxZ10&lt;CR&gt;</b>	
Query for the matrix serial number	MX00Z10<CR>
	Query for the serial number of the matrix
<b>Response: MXxx-Serial No. = MTX09B1000&lt;CR&gt;</b>	

<b>MXxxZ13y&lt;CR&gt;</b>	
Enable/Disable front panel controls	MX00Z131<CR>
y = 0 for disable	Enables front panel controls (default mode)
y = 1 for enable	
<b>Response: MXxx-Front Panel is (locked/unlocked)&lt;CR&gt;</b>	

<b>MXxxZ17y&lt;CR&gt;</b>	
Set volume mode to linear or logarithmic	MX00Z251<CR>
y = 0 for linear	Sets volume to logarithmic mode (default mode)
y = 1 for logarithmic	
<b>Response: MXxx-Volume is Logarithmic&lt;CR&gt;</b>	

<b>MXxxZ18y&lt;CR&gt;</b>	
Set mute release on volume change	MX00Z251<CR>
y = 0 to keep mute on when volume is changed	Sets mute release to on (default mode)
y = 1 to turn mute off when volume is changed	
<b>Response: MXxx-Mute Release is (Enabled/Disabled)&lt;CR&gt;</b>	