RossTalk

v28

Document Information

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Carbonite/Graphite Commands

The switcher can be controlled from a remote editor or computer via RossTalk commands. These commands can be sent to the switcher over an ethernet connection.

Sending RossTalk Commands to Carbonite

Carbonite accepts RossTalk commands over ethernet on port 7788. This allows you to perform various functions such as triggering a GPI, or sending commands to the switcher, such as transitioning a key.

Tip: *Carbonite automatically accepts RossTalk commands on port 7788.*

To Send RossTalk Commands to Carbonite

Note: *Each command should be terminated by a carriage return and a line feed (CR/LF).*

Commands can be sent directly through a telnet connection or any other application that can send ASCII commands.

1. Create a network connection to the switcher on port **7788**. The default IP address of the switcher is 192.168.0.123.

   Tip: *If you are using multiple RossTalk connections, it is recommended that you increment the port number for each device.*

2. At the prompt, enter the commands you want to send.

Carbonite Supported RossTalk Commands

The switcher supports a number of RossTalk commands. The exact commands and how the switcher reacts to the commands is outlined in the following table.

Important: *Carbonite, Carbonite eXtreme, Carbonite Black, Carbonite Solo, Mosaic, and UltraChromeHR number MEs as ME 1, ME 2, and ME 3 with the highest number ME being the program ME. Carbonite Ultra numbers MEs as ME 2, ME 1, ME P/P with ME P/P being the program ME. For example,* `KEYAUTO ME:3:4` *triggers an auto transition of key 4 on ME 3 on Carbonite Black, but* `KEYAUTO ME:P/P:4` *performs the same action on Ultra.*

Note: *All commands are case sensitive.*

In the following commands, the *`ME-source`* is replaced with the bus source.

- **ME** — use `ME`
- **MiniME**™ — use `MME`
- **MultiScreen** — use `MSC`
- **Canvas** — use `MSC`
- **Tile** — use `MME`

Table 1: RossTalk Commands

Command	Description
`CC` *`bcc`*	Executes custom control (*cc*) on bank (*b*). For example, `CC 1:05` triggers custom control 5 on bank 1.
`CKINIT` *`chromakey-number`*	Initialize chroma key engine (*chromakey-number*). For example, `CKINIT 2` initializes chroma key engine 2.
`CLIPEJECT`	Ejects the current clip from the clip player.
`CLIPLOAD` *`clip-name`*	Loads the clip (*clip-name*) into the clip player. For example, `CLIPLOAD trees` loads the clip named `trees` into the clip player.

Command	Description
CLIPLOOPOFF	Turns looping off for the clip player.
CLIPLOOPON	Turns looping on for the clip player.
CLIPPAUSE	Pauses the current clip in the clip player.
CLIPPLAY	Plays the current clip loaded in the clip player.
DOWN *sequencer*	Moves the selection of the next item to be run down one event in the sequence loaded in Sequencer (*sequencer*). For example, DOWN 4 moves the green highlight down an event on the sequence loaded into Sequencer 3.
FOCUS *sequencer*:*event*	Move the selection of the next item to be run to event number (*event*) loaded in Sequencer (*sequencer*). For example, FOCUS 3:2 moves the green highlight to event number 2 on the sequence loaded into Sequencer 3.
FTB	Performs a fade-to-black transition.
GPI *xx*	Performs the action assigned to the GPI input *xx*. If the GPI is assigned as an output, no action is performed. For example, GPI 04 triggers GPI input 4.
HELP	Prints a list of the supported commands.
KEYAUTO *ME-source*:*ME-number*:*keyer*:ON/OFF	Performs an auto transition of keyer number (*keyer*) on ME (*ME-source*) of number (*ME-number*) on-air (ON), off-air (OFF), or toggle (omit :ON/OFF). For example, KEYAUTO ME:1:4 triggers an auto transition of key 4 on ME 1; and KEYAUTO ME:2:1:OFF triggers an auto transition of key 1 on ME 2 only if the key is on-air.
KEYAUTOOFF *ME-source*:*ME-number*:*keyer*	Performs an auto transition of keyer number (*keyer*) on ME (*ME-source*) of number (*ME-number*) to transition the key off-air. For example, if key 4 is on-air, KEYAUTOOFF ME:1:4 triggers an auto transition of key 4 on ME 1. If the key is already off-air, no transition is performed.
KEYAUTOON *ME-source*:*ME-number*:*keyer*	Performs an auto transition of keyer number (*keyer*) on ME (*ME-source*) of number (*ME-number*) to transition the key on-air. For example, if key 4 is off-air, KEYAUTOON ME:1:4 triggers an auto transition of key 4 on ME 1. If the key is already on-air, no transition is performed.
KEYCUT *ME-source*:*ME-number*:*keyer*:ON/OFF	Performs a cut of keyer number (*keyer*) on ME (*ME-source*) of number (*ME-number*) on-air (ON), off-air (OFF), or toggle (omit :ON/OFF). For example, KEYCUT MME:2:1 triggers a cut of key 1 on MiniME™ output 2; and KEYCUT ME:1:3:ON triggers an cut of key 3 on ME 1 only if the key is off-air.
KEYCUTOFF *ME-source*:*ME-number*:*keyer*	Performs a cut of keyer number (*keyer*) on ME (*ME-source*) of number (*ME-number*) to transition the key off-air. For example, if key 1 is on-air, KEYCUTOFF MME:2:1 triggers a cut of key 1 on MiniME™ output 2. If the key is already off-air, no transition is performed.

Command	Description
KEYCUTON *ME-source*:*ME-number*:*keyer*	Performs a cut of keyer number (*keyer*) on ME (*ME-source*) of number (*ME-number*) to transition the key on-air. For example, if key 1 is off-air, KEYCUTON MME:2:1 triggers a cut of key 1 on MiniME™ output 2. If the key is already on-air, no transition is performed.
KEYMODE *ME-source*:*ME-number*:*keyer*:*mode*	Sets the key mode (*mode*) to NORMAL, ADDITIVE, or FULL on ME (*ME-source*) of number (*ME-number*). For example, KEYMODE ME:2:1:NORMAL uses the shaped/unshaped setting from the key setup for key 1 on ME output 2.
LOADSET *name*	Performs a recall of a set by name (*name*). For example, LOADSET set1 loads set1 onto the switcher from the USB. Unlike saving or loading a set from the control panel, RossTalk does not support saving or loading of panel personality settings with the setup. Settings such as color schemes or user button assignments are not included with the set.
MEAUTO *ME-source*:*ME-number*	Performs an auto transition on ME (*ME-source*) of number (*ME-number*). The elements included with the transition are set in the next transition area of the switcher. For example, MEAUTO MSC:2 triggers an auto transition on MultiScreen channel 2.
MECUT *ME-source*:*ME-number*	Performs a cut on ME (*ME-source*) of number (*ME-number*). The elements included with the transition are set in the next transition area of the switcher. For example, MECUT ME:1 triggers a cut on ME 1.
MEM *bm*:*ME-source* :*ME-number*	Performs a recall of memory (*m*) on bank (*b*) on ME (*ME-source*) of number (*ME-number*). For example, MEM 19:ME:2:MME:1 recalls memory 9 on bank 1 of ME 2 and MiniME™ output 1.
MEMSAVE *bm*:*ME-source* :*ME-number*	Performs a store of memory (*m*) on bank (*b*) on ME (*ME-source*) of number (*ME-number*). For example, MEMSAVE 19:ME:2:MME:1 stores memory 9 on bank 1 of ME 2 and MiniME™ output 1.
MNEM *source*:*new-name*	Sets a new mnemonic name (*new-name*) for a video source (*source*). For example, MNEM IN:6:CAM 1 sets the mnemonic name for input 6 to CAM 1.
MS *channel*:*location*:*media-ID*	Loads a still of animation of ID number (*media-ID*) from the USB (1) or internal (0) cache (*location*) into Media-Store channel number (*channel*). For example, MS 1:0:002 loads the AnnaCK still (002) from the internal cache (0) to Media -Store channel 1. If you are using a Mosaic, channels are numbered 101-136.
MVBOX VP|OP:*MultiViewer*:*box*:*source*	Selects a video source (*source*) in a box of number (*box*) for the Video Processor MultiViewer (VP) or I/O MultiViewer (OP) number *MultiViewer*. For example, MVBOX VP:1:5:IN:6 selects input 6 in box 5 of Video Processor MultiViewer channel 1. Aux buses can also be selected as sources.

Command	Description
NEXT *sequencer*	Runs the currently selected item in the sequence loaded into Sequencer (*sequencer*) and advance the current selection to the next item in the sequence. For example, NEXT 2 runs the selected command in Sequencer 3.
SAVESET *name*	Performs a store of a set by name (*name*). For example, SAVESET set1 stores the current switcher settings to set1 on the USB. Unlike saving or loading a set from the control panel, RossTalk does not support saving or loading of panel personality settings with the setup. Settings such as color schemes or user button assignments are not included with the set.
SEQI *sequencer*:*seq*	Loads the sequence (*seq*) into Sequencer (*sequencer*). For example, SEQI 3:15 loads sequence 15 into Sequencer 3.
SEQO *sequencer*	Unloads the sequence from Sequencer (*sequencer*). For example, SEQO 1 unloads any sequence from Sequencer 1.
TRANSINCL *ME-source*:*ME-number*:*incl*:*incl*:*incl*	Sets the next transition area on ME (*ME-source*) of number (*ME-number*), to include the background (B) and/or keys (*incl*). For example, TRANSINCL ME:2:B:2:3 configures the next transition area for ME 2 with **BKGD**, **KEY 2**, and **KEY 3** selected. Note that any existing selections are lost.
TRANSRATE *ME-source*:*ME-number*:*rate*	Sets the transition rate (*rate*), in frames, on ME (*ME-source*) of number (*ME-number*). For example, TRANSRATE ME:1:15 sets the ME transition rate for ME 1 to 15 frames.
TRANSTYPE *ME-source*:*ME-number*:*type*	Sets the transition type (*type*), see below, on ME (*ME-source*) of number (*ME-number*). For example, TRANSTYPE MSC:2:DISS sets the transition type for MultiScreen channel 2 to DISS. • **Dissolve** — DISS • **DVE** — DVE • **Media Wipe** — MEDIA • **Wipe** — WIPE
UP *sequencer*	Moves the selection of the next item to be run up one event in the sequence loaded in Sequencer (*sequencer*). For example, UP 1 moves the green highlight up an event on the sequence loaded into Sequencer 1.
XPT *vid-dest*:*vid-source*	Selects the video source (*vid-source*) on the bus (*vid-dest*). For example, XPT ME:2:PGM:IN:6 selects input 6 on the Program bus of ME 2; XPT ME:3:KEY:2:IN:20 selects input 20 on Key 2 of ME3; XPT AUX:2:ME:1:CLN selects the ME 1 clean feed on Aux bus 2. Refer to the information after this table for a list of sources and destinations.

Possible video destinations (*vid-dest*):

- **Aux Bus** — AUX:*aux-number*
- **Key** — ME:*ME-number*:KEY:*key-number*

- **MiniME**™ — MME:*ME-number*
- **Preset** — ME:*ME-number*:PST
- **Program** — ME:*ME-number*:PGM

Possible video sources (*vid-source*):

- **Aux Bus** — AUX:*aux-number*
- **Black** — BK (*vid-source* only)
- **Chroma Key Alpha** — CKA:*chroma key number* (UltraChromeHR, Carbonite Black v14.0 or higher only, or Carbonite Ultra)
- **Chroma Key Video** — CK:*chroma key number* (UltraChromeHR, Carbonite Black v14.0 or higher only, or Carbonite Ultra)
- **Clean Feed** — CLN
- **Clip Player** — CLIP
- **Input Source** — IN:*input-number*

> ***Tip:*** *On Graphite and the CBF-113 (Carbonite Solo 13) the HDMI™ input is IN:13 and on the CBF-109 (Carbonite Solo) the HDMI™ inputs are IN:7, IN:8, and IN:9 for HDMI™ inputs 1-3 respectively.*

- **Matte Color** — BG (*vid-source* only)
- **ME Background** — ME:*ME-number*:BKGD
- **ME Clean** — ME:*ME-number*:CLN (*vid-source* only)
- **Media-Store** — MS:*channel-number*
- **ME Key Alpha** — ME:*ME-number*:KEY:*key-number*:A
- **ME Key Video** — ME:*ME-number*:KEY:*key-number*:V
- **ME MediaWipe Alpha** — ME:*ME-number*:MWA
- **ME MediaWipe** — ME:*ME-number*:MW
- **ME Preset** — ME:*ME-number*:PST
- **ME Preview** — ME:*ME-number*:PV
- **ME Program** — ME:*ME-number*:PGM
- **MiniME**™ **Background** — MME:*ME-number*:BKGD
- **MiniME**™ **Combined Key** — MME:*ME-number*:CMB
- **MiniME**™ **Key Alpha** — MME:*ME-number*:KEY:*key-number*:A
- **MiniME**™ **Key Video** — MME:*ME-number*:KEY:*key-number*:V
- **MiniME**™ **Preset** — MME:*ME-number*:PST
- **MiniME**™ **Preview** — MME:*ME-number*:PV
- **MiniME**™ **Program** — MME:*ME-number*:PGM
- **Preview** — PV
- **Program** — PGM
- **XPression (alpha)** — XP:*channel-number*:A (Graphite only)
- **XPression (video)** — XP:*channel-number*:V (Graphite only)

XPression Commands

The XPression motion graphics system can be controlled from a remote device or computer via RossTalk commands. These commands can be sent to the switcher over an ethernet connection.

Sending RossTalk Commands to XPression

XPression accepts RossTalk commands over ethernet on port 7788. This allows you to perform various functions such as Take, Next, move up or down in the sequencer, and trigger a GPI.

To Send RossTalk Commands to XPression

Note: *Each command should be terminated by a carriage return and a line feed (CR/LF).*

1. Click **Edit** > **Hardware Setup**.
2. Click the **GPI Boards** tab.
3. Click **Add** and in the **Brand** list, click **RossTalk**.
4. Click **OK**.
5. In the **State** list, click **Enabled**.
6. Click **TCP** and in the **TCP Port** list, click **7788**.

XPression Supported RossTalk Commands

XPression supports a number of RossTalk commands. The exact commands and how XPression reacts to the commands is outlined in the following table.

Note: *All commands are case sensitive.*

Note: *The framebuffer numbering in RossTalk does not match the numbering in XPression. For example, to select framebuffer 1 in XPression you must enter framebuffer 0 in RossTalk. For framebuffer 2, enter 1, and so on.*

Table 2: RossTalk Commands

Command	Description
CLFB *buffer*	Clears framebuffer number *buffer*. For example, CLFB 0000 clears framebuffer 1.
CLFB *buffer*:*layer*	Clears layer number *layer* in framebuffer number *buffer*. For example, CLFB 0000:2 clears layer 2 on framebuffer 1.
CLRA	Clears all framebuffers.
CUE *takeid*:*buffer*:*layer*	Prepares take item *takeid* to go to air next in framebuffer number *buffer* on layer number *layer*. The take item is not taken to air, but is prepared to be taken to air without any frame delay. For example, CUE 3:2:-5 prepares to load the take item 3 into the framebuffer 3 and onto layer -5.
DOWN	Move the current selection in the sequencer to the item below it in the list.
FOCUS *takeid*	Set the sequencer focus to the take item number *takeid*. For example, FOCUS 0005 set the focus to take item 0005.
GPI *gpi*	Trigger the simulated GPI input *gpi*. This is treated as if the GPI input were triggered externally. For example, GPI 5 triggers GPI input 5.

Command	Description
LAYEROFF *buffer*:*layer*	Takes a scene in framebuffer number *buffer* on layer number *layer* off air using the defined out transition. For example, LAYEROFF 0000:2 removes the scene on layer 2 of framebuffer 0000 (the first framebuffer).
NEXT	Take the current take item in the sequencer to air and advance the current selection to the next item in the list.
READ	Take the current selection in the sequencer to air.
RESUME *buffer*	Resumes all layers in framebuffer number *buffer*. For example, RESUME 0000 resumes all layers in framebuffer 1.
RESUME *buffer*:*layer*	Resumes layer number *layer* in framebuffer number *buffer*. For example, RESUME 0000:2 resumes layer 2 in framebuffer 1.
SEQI *takeid*:*layer*	Loads the take item *takeid* to air on layer number *layer* to the output channel selected in the template. The Sequencer focus moves to this item. For example, SEQI 0005:7 loads the take item 0005 onto layer 7.
SEQO *takeid*	Takes the take item *takeid* off-air. For example, SEQO 0005 takes the template with TakeID 5 off-air.
SWAP *buffer*	Loads all the take items that are currently in the cued state to air in framebuffer number *buffer*. If a framebuffer is not specified, all cued take items in all framebuffers are taken to air. For example, SWAP 0 takes all the cued take items in framebuffer 1 to air.
TAKE *takeid*:*buffer*:*layer*	Loads take item *takeid* to air in framebuffer number *buffer* on layer number *layer*. The Sequencer focus does not move to this item. For example, TAKE 5:0:7 loads the template with TakeID 5 into framebuffer 1 and onto layer 7.
UNCUEALL	Removes all cued items from the cued state.
UNCUE *takeid*	Remove item with take id *takeid* from the cued state.
UP	Move the current selection in the sequencer to the item above it in the list.
UPNEXT *takeid*	Sets the preview to the take item *takeid* in the sequencer without moving the focus bar.

Acuity™/Vision Commands

The switcher can be controlled from a remote editor or computer via RossTalk commands. These commands can be sent to the switcher over an ethernet connection.

Sending RossTalk Commands to Acuity™/Vision

Acuity™ and Vision accept RossTalk commands over ethernet on port 7788. This allows you to perform various functions such as triggering a GPI, or sending commands to the switcher, such as transitioning a key.

To Send RossTalk Commands to Acuity™/Vision

Note: *Each command should be terminated by a carriage return and a line feed (CR/LF).*

1. Press **HOME** > **Setup** > **Installation** > **Com Setup** > **Type**.
2. Use the **Com Port** knob to select the port that you want to assign to the RossTalk device.
3. Use the **Device** knob to select **RossTalk**.
4. Press **Select Device** and use the **Device** knob to select **RTalk-IN**.
5. Press **Com Type** and use the **Type** knob to select **Network TCP**.
6. Press **Com Settings** and use the **Client/Server** knob to select **Server**.
7. In the **Remote Port** field, enter 7788.

   Tip: *If you are using multiple RossTalk connections, it is recommended that you increment the port number for each device.*

8. Press **Extra Options**.

Option	Value
Cmd Response	OFF (default)

9. Press **HOME** > **Confirm**.

Acuity™/Vision Supported RossTalk Commands

The switcher supports a number of RossTalk commands. The exact commands and how the switcher reacts to the commands is outlined in the following table.

Note: *When you are entering commands for Vision, you must use MLE instead of ME. Acuity™ supports both ME and MLE.*

Note: *All commands are case sensitive.*

Tip: *You can query the current state of a switcher component by replacing the selection part of the command with a ? For example, MVBOX 2:6:? returns what source is selected in box 6 on MultiViewer channel 2. The query function only applies to the XPT, MS, MNEM, TRANSRATE, TRANSTYPE, TRANSINCL, MVBOX, and KEYSHAPED commands.*

Table 3: RossTalk Commands

Command	Description
CAPTURE DISK/RAM:*channel*:*source*:*frames*	Performs a capture to RAM (RAM) or directly to disk (DISK) of the video source (*source*) using Media-Store channel (*channel*) for a duration of (*frames*) frames. For example, CAPTURE 3:PVW:5 performs a capture of the Preview video source, using Media-Store channel 3, and with a duration of 5 frames. If you want to capture from an aux, you must replace PVW with the bank and aux (AUX:*aux-bank-number*:*aux-number*). For example, CAPTURE DISK:1:AUX:8:3:6 performs a capture to disk of Bank 8, Aux 3, using Media-Store channel 1, and with a duration of 6 frames. The switcher will reply when the capture is completed.
CC *b*:*cc*	Executes custom control (*cc*) on bank (*b*). For example, CC 1:05 triggers custom control 5 on bank 1.
FTB	Performs a fade-to-black transition.
GPI *xx*	Performs the action assigned to the GPI input *xx*. If the GPI is an output, no action is performed. For example, GPI 04 triggers GPI input 4.
GPI *xx*:*On/Off*	Set GPI *xx* to on (On or 1) or off (Off or 0). For example, GPI 04:Off sets GPI 4 to off.
HELP	Prints a list of the supported commands.
KEYAUTO *ME*:*keyer*	Performs an auto transition of keyer number (*keyer*) on ME number (*ME*). For example, KEYAUTO 1:4 triggers an auto transition of key 4 on ME 1.
KEYAUTOON *ME*:*keyer*	Transitions keyer number (*keyer*) on ME number (*ME*) on-air if the key is not currently on-air. For example, if key 2 is not currently on-air on ME 3, KEYAUTOON 3:2 triggers a transition of key 2 on ME 3.
KEYAUTOOFF *ME*:*keyer*	Transitions keyer number (*keyer*) on ME number (*ME*) off-air if the key is currently on-air. For example, if key 4 is currently on-air on ME 1, KEYAUTOON 1:4 triggers a transition of key 4 on ME 1.
KEYCUT *ME*:*keyer*	Performs a cut of keyer number (*keyer*) on ME number (*ME*). For example, KEYCUT 2:1 triggers a cut of key 1 on ME 2.
KEYCUTON *ME*:*keyer*	Cuts keyer number (*keyer*) on ME number (*ME*) on-air if the key is not currently on-air. For example, if key 2 is not currently on-air on ME 3, KEYCUTON 3:2 triggers a cut of key 2 on ME 3.
KEYCUTOFF *ME*:*keyer*	Cuts keyer number (*keyer*) on ME number (*ME*) off-air if the key is currently on-air. For example, if key 4 is currently on-air on ME 1, KEYCUTON 1:4 triggers a cut of key 4 on ME 1.

Command	Description
KEYSHAPED *ME*:*keyer*:ON/OFF	Turns shaped keying on (ON) or off (OFF) for keyer number (*keyer*) on ME number (*ME*). For example, KEYSHAPED 2:1:ON turns shaped keying on for key 1 on ME 2.
KEYSTATE *ME*:*key*	Returns whether key number (*key*) on ME number (*ME*) is on (On) or off (Off). For example, KEYSTATE 4:4 returns the on-air state of key 4 on ME 4.
LOADSET USB/HD:*setname*	Loads setup name (*setname*) from the USB drive (USB) or hard drive (HD). For example, LOADSET HD:SETUP01 loads SETUP01 from the hard drive.
MEAUTO *ME*	Performs an auto transition on ME (*ME*). The elements included with the transition are set in the next transition area of the switcher. For example, MEAUTO 2 triggers an auto transition on ME 2.
MECUT *ME*	Performs a cut on ME (*ME*). The elements included with the transition are set in the next transition area of the switcher. For example, MECUT 1 triggers a cut on ME 1.
MEM *bm*:*ME*	Performs a memory recall of memory (*m*) on bank (*b*) on ME (*ME*). For example, MEM 19:2:1 recalls memory 9 on bank 1 of ME 2 and ME 1. You can also query what the last memory recalled on an MEwas using MEM ?:*ME*. Entering MEM ? returns the last memory recalled on the program ME.
MEMSAVE *bm*:*ME*	Performs a store to memory (*m*) on bank (*b*) on ME (*ME*). For example, MEMSAVE 23:1:2:4 stores memory 3 on bank 2 on ME 1, ME 2, and ME 4.
MNEM *source*:*new-name*	Sets a new mnemonic name (*new-name*) for a video source (*source*). For example, MNEM IN:6:CAM 1 sets the mnemonic name for input 6 to CAM 1.
MS *media-store*: *channel*:*media-ID*	Loads a media file of ID number (*media-ID*) into the Global-Store (GS), Global-Store Audio (GSA), or ME-Store (ME:*ME#*) cache (*media-store*) into channel number (*channel*). For example, MS ME:4:2:52 loads the media file 52 into channel 2, of the ME-Store on ME 4.
MSPLAY *media-store*: *channel*	Play the media file currently loaded in the Global-Store (GS), Global-Store Audio (GSA), or ME-Store (ME:*ME#*) cache (*media-store*) into channel number (*channel*). For example, MSPLAY GSA:2 plays the media item loaded into Global-Store Audio channel 2.
MVBOX *MultiViewer*:*box*:*source*	Selects a video source (*source*) in a box of number (*box*) for MultiViewer number *MultiViewer*. For example, MVBOX 1:5:IN:6 selects input 6 in box 5 of MultiViewer channel 1. Aux buses can also be selected as sources.
RESETALL	Performs an ALL+ALL soft reset on the switcher. There are no other parameters for this command.

Command	Description
SAVESET USB/HD:*setup*:*setname*	Saves the switcher setting to setup number (*setup*) with the name (*setname*) to the USB drive (USB) or hard drive (HD). For example, SAVESET USB:5:MORNING saves a setup called MORNING to setup 5 on the USB drive. If you don't include the *setup* number the switcher will try to match the *setname* and overwrite it.
SETVIDMODE REF:*format*	Set the format (*format*) of the input reference to the switcher. Uses the same internal or external source as well as reference board that is currently selected. For example, SETVIDMODE REF:1080i50 sets the switcher expect 1080i 50Hz as the input reference format.
SETVIDMODE VID:*format*	Set the video format (*format*) that you want the switcher to operate in. For example, SETVIDMODE VID:1080i59.94 sets the switcher to operate in the 1080i 59.94Hz video format and SETVIDMODE VID:480i 16x9 sets the switcher to operate in the 480i video format with a 16:9 aspect ratio.
TRANSINCL *ME*:*incl*:*incl*:*incl*	Sets the next transition area on ME number (*ME*), to include the background (B) and/or keys (*incl*). For example, TRANSINCL 2:B:2:3 configures the next transition area for ME 2 with **BKGD**, **KEY 2**, and **KEY 3** selected. Note that any existing selections are lost.
TRANSRATE *ME*:*rate*	Sets the transition rate (*rate*), in frames, on ME number (*ME*). For example, TRANSRATE 2:15 sets the ME transition rate for ME 2 to 15 frames.
TRANSTYPE *ME*:*type*	Sets the transition type (*type*), see below, on ME number (*ME*). For example, TRANSTYPE 3:DISS sets the transition type for ME 3 to DISS. • **Dissolve** — DISS • **Wipe** — WIPE • **DVE** — DVE • **Media Wipe** — MEDIA
USERVAR *name*:*value*	Assign a number (*value*) to the user variable with the name (*name*). For example USERVAR A:10 creates a variable of the name A with a value of 10.
USERVAR *name*:*operation*:*value*	Perform the operation (*operation*) (+ - * / =) with a value of (*value*) on the user variable with the name (*name*). For example, USERVAR A:+:5 adds 5 to the variable A.
VERSION	Returns the current version of software running on the switcher.
XPT *vid-dest*:*vid-source*	Select a video source (*vid-source*) on (*vid-dest*). For example, XPT ME:2:PGM:IN:6 selects input C6 on the Program bus of ME 2. Refer to the information after this table for a list of sources and destinations.

Possible video destinations (*vid-dest*):

- **Aux Bus** — AUX:*aux-bank-number*:*aux-number*
- **Key** — ME:*ME-number*:KEY:*key-number*
- **Key (alpha/backside/2nd DVE channel)** — ME:*ME-number*:KEY:*key-number*:KEYBUS:2

  Tip: *The second channel of the key is either the alpha channel, backside video, or DVE channel, depending on how the key is configured.*

- **Preset** — ME:*ME number*:PST
- **Program** — ME:*ME number*:PGM

Possible video sources (*vid-source*):

- **Aux Bus** — AUX:*aux-bank-number*:*aux-number*
- **Black** — BK (*vid-source* only)
- **Clean** — ME:*ME number*:CLN:*cln-number* (Clean Feed 1-2 only) (*vid-source* only)
- **Global-Store** — GS:*channel-number*
- **Input Source** — IN:*input-number* (*vid-source* only)
- **Key** — ME:*ME-number*:KEY:*key-number*
- **Matte Color** — BG:*BKGD-number* (*vid-source* only)
- **ME-Store** — MS:*ME-number*:*channel-number*
- **MultiViewer A** — MVA:*Head A on MultiViewer number*
- **MultiViewer B** — MVB:*Head B on MultiViewer number*

Possible ME Sources (*ME*)

- **Preview** — ME:*ME number*:PV
- **Program A/B** — ME:*ME number*:PGM (selects PGMA or PGMB depending on what is selected on the panel)
- **Program A** — ME:*ME number*:PGMA
- **Program B** — ME:*ME number*:PGMB
- **Program C** — ME:*ME number*:PGMC
- **Program D** — ME:*ME number*:PGMD
- **Program E** — ME:*ME number*:PGME
- **Program F** — ME:*ME number*:PGMF

openGear® Commands

The MDK-111A-M, MDK-111A-K, and MC1-MK can each be controlled from a remote editor or computer via RossTalk commands. These commands can be sent to these openGear® cards over an ethernet connection (TCP/UDP) or via a serial port (RS-232/RS-422) on the rear module of the card.

Sending RossTalk Commands to openGear®

The openGear® cards accept RossTalk commands over ethernet on port 7788 or through a direct serial connection. This allows you to perform various functions such as triggering a GPI, or sending commands to the cards, such as transitioning a key.

To Send RossTalk Commands to an openGear® Card

Note: *Each command should be terminated by a carriage return and a line feed (CR/LF).*

1. From the Tree View, expand the node for the card you want to access.
2. Select the **Config** tab.
3. Select the **Remote Control** tab.
4. Select the type of communication you want to use.
   - **Serial** — locate the **Serial Port** area and select **RossTalk** from the **Protocol** menu.
   - **Ethernet** — locate the **RossTalk** row in the **Ethernet Port** area and select the ethernet protocol you want to use.
5. Configure the port.
   - **Serial** — select the Port Type, Bit Rate, Data Bits, Parity, and Stop Bits settings.
   - **Ethernet** — use the factory default settings.
6. Enable the port.
   - **Serial** — select the **Port Enabled** check box.
   - **Ethernet** — select the **RossTalk Enabled** check box.

openGear® Supported RossTalk Commands

The openGear® cards supports a number of RossTalk commands. The exact commands and how the card reacts to the commands is outlined in the following table.

Note: *All commands and file names are case sensitive.*

Table 4: RossTalk Commands

Command	Description
`FTB`	Performs a fade-to-black transition. (Not supported on the MDK-111A-K.)
`GPI` *`gpi`*	Trigger the GPI input *gpi*. This is treated as if the GPI input were triggered externally. For example, `GPI 8` triggers GPI input 8.
`KEYAUTO 1:`*`keyer`*	Performs an auto transition of keyer number (*keyer*). For example, `KEYAUTO 1:2` triggers an auto transition of key 2.
`KEYCUT 1:`*`keyer`*	Performs a cut of keyer number (*keyer*). For example, `KEYCUT 1:1` triggers a cut of key 1.

Command	Description
`MSPATH` *`channel`*`:0:`*`file-name`*	Loads a media file (*file-name*) from the CompactFlash® (0) into Logo channel number (*channel*). For example, `MSPATH 4:0:Logo/Ross_LOGO.png` loads the media file called Ross_LOGO.png from the Logo directory into channel 4.
`VGPIARM` *`vgpi`*`:`*`arm`*	Arm (*arm* = 1) or disarm (*arm* = 0 or 2) the effect number (*vgpi*) on preset.
`VGPISTATE` *`vgpi`*`:`*`state`*	Takes the effect number (*vgpi*) on-air (*state* = 1) or off-air (*state* = 0).

Ultrix™ Commands

The Ultrix™ router can be controlled from a remote editor or computer via RossTalk commands. These commands can be sent to the router over an ethernet connection.

Sending RossTalk Commands to Ultrix™

Ultrix™ accepts RossTalk commands over ethernet on port 7788. This allows you to perform various functions such as triggering a GPI or operating a timer.

Tip: *Ultrix™ automatically accepts RossTalk commands on port 7788.*

To Send RossTalk Commands to Ultrix™

Note: *Each command should be terminated by a carriage return and a line feed (CR/LF).*

1. Create a network connection to the router on port **7788**.

   Tip: *If you are using multiple RossTalk connections, it is recommended that you increment the port number for each device.*

2. At the prompt, enter the commands you want to send to the router.

Ultrix™ Supported RossTalk Commands

The router supports a number of RossTalk commands. The exact commands and how the router reacts to the commands is outlined in the following table.

Note: *All commands are case sensitive.*

Table 5: RossTalk Commands

Command	Description
`GPI` *`XX`*	Send the fire command for salvo *XX*. For example, `GPI 23` sends the command to fire salvo 23.
`TIMER` *`XX`*`:END`	Send the end command for clock *XX*. For example, `TIMER 4:END` sends the end command for timer 4.
`TIMER` *`XX`*`:PAUSE`	Send the pause command for clock *XX*. For example, `TIMER 1:PAUSE` sends the pause command for timer 1.
`TIMER` *`XX`*`:RUN`	Send the run command for clock *XX*. For example, `TIMER 3:RUN` sends the run command for timer 3.
`TIMER` *`XX`*`:STOP`	Send the stop command for clock *XX*. For example, `TIMER 2:STOP` sends the stop command for timer 2.
`XPT D:`*`vid-dest`* `S:`*`vid-source`* `I:`*`user-id`* `L:`*`levels`*	User or panel number (*user-id*) is requesting the video source (*vid-source*) be selected on destination (*vid-dest*) on levels (*levels*). For example, `XPT D:5 S:16 I:7 L:1,6,10-13` selects source 16 on destination 5 for levels 1, 6, and 10 through 13 with the request coming from user/panel ID 7. Each argument is separated by a space. Multiple levels are separated by a comma, with no spaces, and can include ranges. Levels are optional and don't need to be included.

Ross® Video Server (Mira, Tria, Kiva) Commands

The Ross® video servers (Mira, Tria, and Kiva families) can be controller from a remote editor or computer via RossTalk commands. These commands are sent to the server over an ethernet connection.

Sending RossTalk Commands to a Ross® Video Server

The Ross® video servers accept RossTalk commands over ethernet on port 7788. This allows you to perform various functions such as cue and play a clip on a channel.

Tip: *Ross® servers automatically accept RossTalk commands on port 7788.*

To Send RossTalk Commands to a Ross® Video Server

Note: *Each command should be terminated by a carriage return and a line feed (CR/LF).*

1. Create a network connection to the server on port 7788.

   Tip: *If you are using multiple RossTalk connections, it is recommended that you increment the port number for each device.*

2. At the prompt, enter the commands you want to send.

Ross® Video Servers Supported RossTalk Commands

The servers support a number of RossTalk commands. The exact commands and how the server reacts to the commands is outlined in the following table.

Note: *All commands are case sensitive.*

Note: *Clip names must include the path relative to the default `H:\video\` directory. If a clip is located in the `video` directory then you only need to provide the name of the clip. If a clip is located in a subdirectory, then you need to provide that relative path, for example `\news\crime-report.clip`.*

Table 6: RossTalk Commands

Command	Description
`CUE` *`channel:clip`*	Load a clip of the name *clip* into channel *channel*. For example, `CUE D:crime-report.clip` loads a clip with the name **crime-report.clip** into **Channel D** of the server.
`CUE` *`channel:clip:timecode`*	Load a clip of the name *clip* at position *timecode* into channel *channel*. For example, `CUE A:goal-highlight.clip:00,00,15,00` loads a clip with the name **goal-highlight** into **Channel A** of the server and seeks to **750 frames** into the clip.
`PLAY` *`channel`*	Play the clip currently loaded into channel *channel*. For example, `PLAY B` plays the clip currently loaded into **Channel B**.
`PLAY` *`channel:clip`*	Load a clip of the name *clip* into channel *channel* and play it from the beginning. For example, `PLAY B:storm.clip` loads the clip **storm.clip** into **Channel B** and plays it from the beginning of the clip.
`PLAY` *`channel:clip:timecode`*	Load a clip of the name *clip* into channel *channel* and play it from position *timecode*. For example, `PLAY B:storm.clip:00,00,03,10` loads the clip **storm** into **Channel B**, seeks to timecode **00,00,03,10** and plays it from that position.
`STOP` *`channel`*	Stop the clip currently playing in channel *channel*. For example, `STOP F` stops **Channel F**.
`GOTO` *`channel:timecode`*	Seek to the position *timecode* in the clip loaded into channel *channel*. For example, `GOTO A:00,00,00,20` seeks to position **00,00,00,20** in the clip loaded into **Channel A**.

Command	Description
JOG *channel*:*amount*	Jog backward or forwards by *amount* in the clip loaded into channel *channel*. For example, JOG C:-20f jogs in reverse by **20 frames** in the clip loaded into **Channel C**.
LOOP *channel*:*mode*	Set the clip repeat mode *mode* for channel *channel*. For example, LOOP B:loop sets the clip repeat mode for **Channel B** to **Loop**. The possible modes are off, loop, loop-to, ping-pong, and ping-pong-to.
ANGLE *channel*:*angle*	Select the camera angle *angle* to use from the ISO clip loaded into channel *channel*. For example, ANGLE A:3 sets the playout of the clip loaded into **Channel A** to **Camera Angle 3**.
EJECT *channel*	Unload the clip currently loaded into channel *channel*. For example, EJECT A unloads the clip in **Channel A**.