RossTalk Commands

The RossTalk protocol is a plain text based protocol that allows control of Ross Video equipment.

Carbonite 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.

To Send RossTalk Commands to Carbonite

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

1. Create a network connection to the switcher on port **7788**. The default IP address of the switcher is 192.168.0.123.
2. At the prompt, enter the commands you want to send to the switcher.

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.

Note: *All commands are case sensitive.*

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

- **ME** — ME
- **MiniME™** — MME
- **MultiScreen** — MSC

Table 1: RossTalk Commands

Command	Description
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 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*	Performs an auto transition of keyer number (*keyer*) on ME (*ME-source*) of number (*ME-number*). For example, KEYAUTO ME:1:4 triggers an auto transition of key 4 on ME 1.
KEYCUT *ME-source*:*ME-number*:*keyer*	Performs a cut of keyer number (*keyer*) on ME (*ME-source*) of number (*ME-number*). For example, KEYCUT MME:2:1 triggers a cut of key 1 on MiniME™ output 2.
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.
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.
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

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Command	Description
	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.
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
XPT *vid-dest*:*vid-source*	Select a video source (*vid-source*) on a 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)
- **Clean** — ME:*ME-number*:CLN (*vid-source* only)
- **Input Source** — IN:*input-number*
- **Key** — ME:*ME-number*:KEY:*key-number*
- **Matte Color** — BG (*vid-source* only)
- **Media-Store** — MS:*channel-number*
- **MiniME™** — MME:*ME-number*
- **Preview** — ME:*ME-number*:PV
- **Program** — ME:*ME-number*:PGM

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.

Command	Description
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.
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.
UP	Move the current selection in the sequencer to the item above it in the list.

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 **Remote *X*** port that you 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.
8. 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, and MVBOX commands.*

Table 3: RossTalk Commands

Command	Description
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.
HELP	Prints a list of the supported commands.

Command	Description
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.
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.
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.
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.
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.
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.
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) or ME-Store (*MEME#*) cache (*media-store*) into channel number (*channel*). For example, MS ME4:2:52 loads the media file 52 into channel 2, of the ME-Store on ME 4.
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.
SAVESET USB/HD:*setname*	Saves the switcher setting to setup name (*setname*) to the USB drive (USB) or hard drive (HD). For example, SAVESET USB:MORNING saves a setup called MORNING to the USB drive.
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
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-number*
- **Key** — ME:*ME-number*:KEY:*key-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)
- **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:*channel-number*
- **MultiViewer A** — MVA:*Head A on MultiViewer number*
- **MultiViewer B** — MVB:*Head B on MultiViewer number*
- **Preview** — ME:*ME number*:PV
- **Program** — ME:*ME number*:PGM

openGear® Commands

The MDK-111A-M, MDK-111A-K, MDK-111B-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.
`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.