

EmbeddedTriggers Insertion

The EmbeddedTriggers feature allows you to insert the identifier for a custom control into the vertical ancillary data space (VANC) of a video signal coming out of the Carbonite switcher. When the video signal is received by the Vision switcher it runs the custom control that was identified in the EmbeddedTriggers message.

Both switchers must be set up to process the EmbeddedTriggers message and there must not be a device between the two switchers that could corrupt or strip the VANC data.

This protocol can only be used to insert custom control identifiers and can only be used to pass this information from a Carbonite switcher to a Vision switcher.

Important: Your Vision switcher must have the Frame CPU board 4800AR-002-01 or higher to process the EmbeddedTriggers messages.

The EmbeddedTriggers message is made up of a DID, SDID, reference ID, and payload with the custom control identifier. When inserted, the entire message is sent 16 times to ensure that the message is properly received and is not corrupted in transmission. Corrupt messages are logged by the downstream Vision switcher, but there is no notification passed upstream to the Carbonite switcher.

Carbonite Setup

The Carbonite switcher can only be set up to send EmbeddedTriggers messages. When setting up the switcher, you must select the DID, and SDID of the EmbeddedTriggers message. You will also need to enter these numbers into the Vision switcher that is intended to receive the EmbeddedTriggers message.

To Set Up EmbeddedTriggers Messages

1. Press **MENU > SYSTEM > NEXT > NEXT > NEXT > EmTrig Config**.
2. Use the **RemoteID** knob to select the Remote ID you want to use for the message.
Use the Remote ID to identify the switcher that the EmbeddedTriggers message is coming from.
3. Press **NEXT**.

4. Use the **Line** knob to select the line in the VANC that the EmbeddedTriggers message will be inserted on.

Note: The switcher will insert the EmbeddedTriggers message at the start of the line and blank the rest of the line.

The range of lines is restricted to lines 12 to 19 so that if you select a different video format the EmbeddedTriggers message does not have to be set up again.

5. Use the **DID** and **SDID** knobs to select the Data Identifier word (**DID**) and Secondary Data Identifier word (**SDID**) that you want to use for the EmbeddedTriggers message.
 - **DID** — you can select between 80 (0x50) and 95 (0x5F).
 - **SDID** — you can select between 1 (0x1) and 255 (0xFF).
6. Press **NEXT**.
7. Use the **Output** knob to select the output BNC that you want to send the EmbeddedTriggers message out on.
8. Use the **State** knob to select whether the EmbeddedTriggers message is sent out the BNC (**ON**), or not (**OFF**).

The EmbeddedTriggers message can be sent out of multiple BNCs.

To Insert and Send a EmbeddedTriggers Message

1. Press **MENU > BANK 1 > START/STOP**.
2. Use the **Bank** knob to select the bank that the custom control you want to record will be stored on, or select the bank button directly.
3. Use the **CC** knob to select the custom control that you want to record to, or select the custom control on the bus directly. If the custom control already has a macro recorded, an * is shown next to the number.
4. Press **Record Start** to start recording. On the C1 this is the **START/STOP** button.

5. Press **INSERT** and use the **Insert** knob to select **EmTrig**.
6. Use the **Bank** and **CC** knobs to select the custom control on the Vision switcher that you want to run.
7. Press the **Insert** knob to insert the event.
8. Press **Record Stop** to finish recording. On the C1 this is the **START/STOP** button.

When you run this custom control, it will insert a EmbeddedTriggers message into the video signal of the selected output BNC that will tell the switcher receiving the message to run the selected custom control.

Vision Setup

The Vision switcher can only be set up to receive EmbeddedTriggers messages. When setting up the switcher, you must select the DID and SDID that the switcher sending the EmbeddedTriggers message is using. The Vision switcher will scan all supported lines in the VANC for the selected DID and SDID and then run the custom control.

Tip: Use the same procedure to set up the Acuity switcher.

To Receive EmbeddedTriggers Messages

1. Press **HOME > Setup > Installation > Com Setup > Type**.
2. Use the **Com Port** knob to select an unused **NET #** port.
3. Use the **Device** knob to select **Editor**.
4. Press **Select Device** and use the **Device** knob to select **EmTriggers**.
5. Press **Com Type** and use the **Type** knob to select **VANC**.
6. Use the **Input** knob to select the input BNC that the video signal with the EmbeddedTriggers message will be received on.

This is the video signal coming from the Carbonite switcher.
7. Press **Com Settings** and use the **DID** and **SDID** knobs to select the Data Identifier word (**DID**)

and Secondary Data Identifier word (**SDID**) that you assigned to the EmbeddedTriggers messages on the Carbonite switcher.

8. Press **HOME > Confirm**.
9. Press **HOME > More > Remote Enables** and press **Editor** to select **On**.

The switcher is now ready to receive EmbeddedTriggers messages. Any EmbeddedTriggers messages that are received by the switcher are shown on the **Remote Enables** menu.