Using the CIM-2000 as a Mute Module

The CIM-2000 can be used as a mute module that monitors RX audio and mutes Repeat audio during data transmission. This application could be used in a repeater system when you don't want ANI data bursts to be repeated through the system.

How it Works:
The CIM-2000 is an encoder/decoder module so it has the capability to detect incoming MDC-1200 or GE Star data bursts. One of its standard functions is to mute incoming data. This function can also be used in a stand-alone manner. Once the module detects data and confirms that it is valid data, the "mute" line of the module becomes active until the data is completed.

If the source of the dispatcher's audio is the repeater's receive audio, and ANI data is not required at any other receivers, then the ANI data can be stripped from the repeat audio. Only a small portion of the beginning of the data burst will pass through.

How to make it work:
If this is the only feature of the CIM-2000 being used at the repeater site, you will only need to use the following connections:

CIM-2000 Wire Color	Function	Placement
Red	A+	Switched DC voltage >3.6VDC <15VDC
Black	Ground	Ground
White/Red	Data Input	Receive discriminator Audio
White/Violet	Data Mute	Repeat Transmit Audio

Ensure that there is sufficient circuit separation between the White/Red wire and the White/Violet wire to prevent the mute from actually muting the receive data input of the CIM-2000.

You will need to program the CIM-2000 for the signaling format which is being used on your system (MDC-1200 or GE Star). If your system is mixed, you will need one CIM-2000 for MDC-1200 and another for GE Star.

Additional Information:
The Data Mute line of the CIM-2000 is an open-collector transistor circuit capable of sinking up to 100 mA. If your application requires a positive voltage to activate a gate instead of an open-collector to ground audio, the function of Data Mute can be programmed to use the "aux-out" line which has an on-board transistor pair that has jumper selectable output capabilities.