VCA & MUTE GROUPS

Soundcraft Vi Series™ supports up to 8 MUTE Groups (MG) and 16 VCA masters.

![Figure 9-1: MUTE & VCA Front Panel Keys](image)

**VCA/MUTE GROUP INDICATION**

Each input and output strip contains a VCA/mute group display. [MUTE], [VCA 1-8] and [VCA 9-16] set the display mode for all strips.

![Figure 9-2: VCA/MUTE GROUP Indication](image)
MUTE GROUP MASTER SWITCHES

The four switches labelled 1-4 activate Mute Groups when pressed.

VCA CONTROL GROUP BEHAVIOUR

Up to 16 VCA Groups can be created.

In the normal configuration of the console with a single Output section block, there are only 8 faders available for VCA Masters, therefore Output Fader pages must be used to access all 16.

Similarly there are only 8 assignment LEDs on the Channel and Output faders, and these must be bank-switched with the display switches [VCA 1-8][VCA 9-16] in the Control Block, in order to check all the assignments if more than 8 VCAs are being used.

AUDIO BEHAVIOUR

When a VCA Group has been created, by assigning Input or Output channels to a VCA Master, the following behaviour is followed:

* The Master fader setting applies its dB value as an offset to all member channels. The member channels' fader positions remain unchanged.

* If a channel is assigned to more than one VCA Group, the resultant offset applied to the channel is calculated as the arithmetic sum of the dB values of each VCA Master fader. Any Master fader reaching –inf dB will set all member channels to –inf dB, regardless of other Master fader settings. The maximum gain applied to a member channel as the result of the channel fader setting plus offsets from VCA Master faders is limited to +10dB.

* The [ON]/Off switch on the VCA Master fader acts as a remote control for all member channels' On/Off switches. If a channel which was previously ON is turned OFF by the action of a VCA Master On/Off switch, the channel’s ON switch will illuminate in RED to distinguish this condition from a manually OFF channel.

The VCA Master On/Off switch itself has only 2 states, and always illuminates RED when OFF, Green when ON. (There is no non-illuminated condition). This is because VCA Master On/Offs cannot themselves be remotely muted, so the Red helps to identify ‘Muted’ VCA masters.

* The [SOLO/SEL] switch on the VCA Master fader acts as a remote control for all member channels' Solo switches. The channel 'Sel' function is not activated however.
ASSIGNING VCAs

1. Press the VCA/MUTE GROUP’s [SETUP] key. It will glow blue.

2. Choose the required VCA master by pressing its [SOLO/SEL] key, which will also glow blue. Note that if the output fader page is not displaying VCAs it will be necessary to select the [VCA] page (VCAs 1-8) or the [E] page (VCAs 9-16) first.

3. Press the [SOLO/SEL] key of any channel(s) that is(are) to be assigned to the selected VCA master.

4. Press [SETUP] again to finish the process, or press another VCA master’s [SOLO/SEL] key to assign more channels to another VCA master.

Hint: If the SETUP mode is not switched off after assigning VCAs, channels cannot be soloed.

Hint: The assignment of VCAs should be done with the channel or group faders and the VCA master, to which assignment is being made, being at or near a nominal operating level: i.e. don’t assign a VCA master to a channel or group if the VCA master is at -40dB while the channel or group is at 0dB.

ASSIGNING MUTE GROUPS

1. Press the VCA/MUTE GROUP’s [SETUP] key. It will glow blue.

2. Press the required mute group [1-4] master key, it will glow red. The MUTE/VCA display strip on each channel will show mute assignments in red.

3. Press the [SOLO/SEL] key of any channel(s) that is(are) to be assigned to the selected MUTE master.

4. Press [SETUP] again to finish the process, or press another MUTE master’s key to assign more channels to another MUTE master.

Hint: If the SETUP mode is not switched off after assigning MUTES, channels cannot be soloed.

ASSIGNING VCAS AND MUTE GROUPS TO OUTPUT CHANNELS

It is possible to assign VCAs and/or MUTE Groups to any of the 32 output channels (but not the LRC master outputs). In step 3 of either of the assignment processes above, select one of the output fader pages [A] to [D], and then use the [SOLO/SEL] key below the output fader to assign it to the VCA or Mute Group in question. Note: you must not assign a VCA group to both input and output channels.

VCA GROUPS WHEN AUX SENDS ARE CONTROLLED BY CHANNEL FADERS

The VCA Groups on the Soundcraft Vi Series™ are normally used to control groups of the input channel faders, for use by FOH engineers. In this case they are used to group mono and/or stereo channels together under control of a single master fader, for easier control during a mix. The member channels can also be Soloed or Muted, using the VCA Master [SOLO/SEL] and [ON] switches.

For the Monitor mix engineer, controlling channel faders is of secondary importance to controlling Aux sends from channels, and so on Soundcraft Vi Series the functionality of VCA Groups has been extended to control of groups of Aux sends as well as channel faders.
Effectively, because there can be up to 32 mono Aux sends configured on the console, this means that there are up to 32 sets of VCA groups (each with up to 16 Group Masters), in addition to the set of main channel fader VCA groups. This means that there are up to 33 virtual sets of 16 VCA master faders in total.

VCA control of Auxes is only available by activating the Follow Output Solo [FLW] key next to the master faders, note that the pair of [FLW] keys for the VST Encoder Rows will not access this function.

Due to the Follow Output Solo functionality, it is possible to control only one Aux mix via VCAs at any one time.

**Procedure**

Select the Aux required by selecting the required master fader bank [A]-[D].

Activate the [FLW] key next to the master faders.

Press the [SOLO/SEL] key, under the master fader, for the required Aux. Alternatively, the Aux can be soloed using the solo switches in the Master Vistonics™ screen.

Press [VCA] (for VCA 1-8) or [E](for VCA 9-16). The FaderGlow™ for the master faders will change to blue (VCA 1-8) or pink (VCA 8-16). The faders will move to show the offsets which are being applied to the Aux feeds from those channels which are assigned to the VCAs now being displayed in the master section.

Note that at this point the VCA Master [SOLO/SEL] keys have no function. The VCA [ON] switch controls the Aux send On/Off on the member channels (the channel's [ON] switch is illuminated red if the Aux send is turned Off by a VCA Master [ON] switch.)

To select another Aux for adjustment, press the required bank key [A]-[D], solo the required aux (or solo directly on the VST screen), and press [VCA] or [E]. To exit, press [SOLO CLEAR] and de-select [FLW].

In the example in Figure 9-3, input channel 1 has been assigned to VCA 1, and channels 2, 3 & 4 have been assigned to VCA 4. In order to use the VCAs to control the Aux 5 sends from the input channels proceed as follows: select bank A, activate [FLW], solo Aux MASTER 5 using its [SOLO/SEL] key, press [VCA]. VCA 4’s fader will now control the Aux 5 feeds from input channels 2, 3 & 4; and VCA 1’s fader will now control the Aux 5 feed from input channel 1.

![Diagram showing VCA operation on Aux Sends](image1)

**Figure 9-3. How VCA Groups Operate on Aux Sends.**