Unauthorized User Screening

This is a twist on the Authorize mode.   When non-authorized users attempt to communicate, the C Plus does not display their ID and mutes the attached receiver during the transmission. It could be especially helpful in contracted dispatch situations to eliminate those who have not kept up with their dispatch fees.
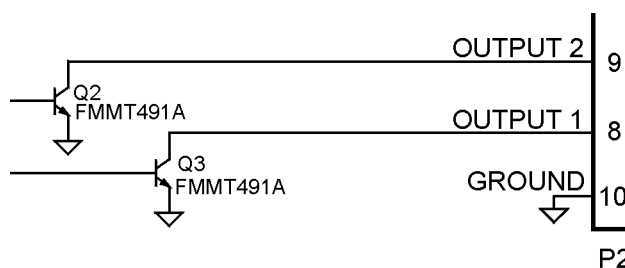
Example:
Dispatch has been told to not assist users with ID's of 1234, 2783, 5497, 3765 and 1123. However, the dispatcher doesn't always check the list. This feature will keep the list internally. If one on the list is detected, the display will be blanked, the C Plus sounder will not sound, and the dispatcher's radio will be muted for the duration of the transmission.

Enabling the Feature:
To enable unauthorized user screening, the following steps must be taken:

1. The Channel Busy line of the C Plus must be attached to a point in the radio that changes state with carrier detect. This could be at the radio squelch gate, the audio amplifier mute line, or an accessory port with CSQ (carrier squelch) connectivity.

2. The Channel Busy line must be activated.

3. Authorize mode must be selected in the main programming menu of the C Plus. In Program mode, at the main menu, select *Enable "Authorize Mode"*.

4   An Alias table must be constructed containing the ID's of the unauthorized user radios. The alias of all entries is assigned eight blanks (   ) and the beep is assigned "0" (zero).

4. OUT1 or OUT2 must be attached to a point in the receiver that when active, the receive audio will be muted. This could be a logic gate or the enable for the audio amplifier.

Special Requirements:
The optional feature "Alias" must be purchased and activated. Contact Cimarron Technologies for information.

Example Alias entry:
```
00001234,           ,,0
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In this example, the ID 1234 has an alias that is eight blanks, there is no assignment field and the Beep has been assigned "0" which will make it silent.

Why it Works:
When the C Plus is in the "Authorize mode" the previously programmed

functions of OUT1 and OUT2 are superseded and they perform as follows:

1. Open collector OUT1 goes to within 0.7v of signal ground (capable of sinking up to 500mA), while OUT2 remains inactive, providing a high impedance.

2. The C Plus begins monitoring channel busy for activity.

3. If activity is detected on channel busy, the C Plus listens for ANI.

4. If ANI data is detected, and the ID is present in the ALIAS table, OUT1 and OUT2 reverse states, bringing OUT1 to high impedance and OUT2 to within 0.7V of signal ground.

5. This reversal remains in effect until channel busy becomes inactive, then OUT1 and OUT2 reverse to their original states.

6. If no ANI data is detected or the decoded ANI ID is not present in the ALIAS table, OUT1 and OUT2 remain in their original states.

When a targeted ID is received, the C Plus decodes the ID and displays all blanks because that is the assigned alias. The sounder remains silent because beep is assigned "0" and the radio is muted for the duration of the reception because OUT1 or OUT2 is used as a radio mute.

See Also:
Alias

COS Qualified Mute

Channel Busy

Mute Feature