CONVENTIONAL PULSE INTERFACE

The following steps outline the procedure for interfacing a conventional radio requiring pulsed control signals to the 20-28:

1. Identify which radio functions should be controlled by the 20-28. The available functions of the conventional pulse interface on the 20-28 are described below.

    - **COR:** Control signal from the radio that is active while receiving audio.
    - **PTT:** Control signal from the 20-28 that is active when the radio should transmit.
    - **Channel Up:** Control signal from the 20-28 to increase the channel on the radio by one. This control will pulse to an active state for a user-defined amount of time before switching to the inactive state.
    - **Channel Down:** Control signal from the 20-28 to decrease the channel on the radio by one. This control is pulsed similar to Channel Up.
    - **Radio Reset:** Control signal from the 20-28 to activate the radio's home function. In addition to pulsing the Radio Reset output, the 20-28 also updates the remote units with the Radio Reset Channel (programmable by the user).
    - **User Defined Outputs:** Several additional open collector outputs are available for controlling other radio functions.

2. Construct the cable end that will connect to the 20-28's P2 Radio connector. A generic cable kit is available from IDA Corporation (Part No. 102-OPT371). The following table lists the connections required to a DB25 male connector for each 20-28 function.

Connection	Function
Pin #1	RX Audio
Pin #7	Ground
Pin #20	+13.8 Vdc
Pin #21	TX Audio
Pin #25	COR
Output #1-8 User-programmable	Channel Up
Output #1-8 User-programmable	Channel Down
Output #1-8 User-programmable	User Defined Outputs
Output #9	PTT
Output #10	Radio Reset

3. Connect the other end of the cable to the radio. This may require modifications to the radio. Consult the radio manual for details.

4. Configure the jumpers on the 20-28 based on the system requirements. Check the audio level adjustments (refer to the maintenance manual).