

# *RLC-3 Communications Controller*

## *How to Install Your Update*

Installing this update in your RLC-3 is not difficult, but you do need to be careful.

- Remember that all of the chips in the RLC-3 are static sensitive. You do not need to be paranoid, but do touch a piece of metal to discharge yourself before you touch the chips.
- Turn the power to the controller off.
  - Remove the cover from the cabinet. Remove the bracket that holds the back of the radio cards. Leave the motherboard screwed down to the bottom tray.
  - Remove the radio port cards. This can be done while they are still hooked together in pairs.
  - Gently pry the EPROMs that you need to replace from their sockets on the motherboard with a flat blade screwdriver. They are labeled something like "RLC-3 V1.XX PROM X". Note which end of the chip has a little notch cut out of it, so you can put the new chips in the same way. This notch must always line up with the notch in the socket. If you put the chip in backwards, it will destroy the chip.
  - Carefully install the new EPROMs. There are four sockets in the motherboard. Most updates will include new EPROMs for sockets 1 and 2. Socket 3 is usually left empty and the chip in socket 4 usually does not need to be changed. Pay attention to which end of the chip the notch is on. **DO NOT** go by the label - sometimes they get put on upside down. If the pins on the chip are too wide to fit in the socket, place the chip sideways on a tabletop and gently bend the pins inward by pressing down on the body of the chip.
  - If you have new EPROMs for the radio cards unscrew the radio port cards from each other. Find the EPROM on each card that is labeled "CARD 1.XX" and remove it. Pay attention to which end of the EPROM the notch is on. Replace them with the new EPROMs labeled "CARD 1.XX". Once again: **DO NOT** go by the label - sometimes they get put on upside down.
  - Screw the cards back together in pairs and re-install them in the controller. Be careful when you press the cards down into place not to bend the level adjustment pots along the top edge of the radio cards. Also make sure none of the pins in the connector to the motherboard get bent.
  - Double check to make sure you put all of the chips in the right way around. If you put the notch at the wrong end, you will destroy the EPROM.
  - Before you put the controller back in the cabinet, you need to reinitialize it (unless specifically noted otherwise). This will erase the old contents of the memory and set it up to work with the new program. If you are successful you will hear the message "I-N-I-T" out of the transmitter that is hooked to port 1 and see the message "All settings have been reset to factory defaults" on the serial terminal. To perform the reinitialization, follow one of the following methods:
    - Method #1: Turn the power off. Press and hold the INIT button on the motherboard. Turn on the power. Wait at least 3 seconds. Release the INIT button.
    - Method #2: Turn the power on. Press and hold the INIT button. Press and release the RESET button. Wait at least 3 seconds. Release the INIT button.
- Your software update is now installed. Enjoy the new features and let us know what you want to see in the future.
- **You must return your old chips (the ones you replaced) before you will receive another update. NO EXCEPTIONS. If you would prefer to buy the old chips instead of returning them, the 27C1001s (the ones in the motherboard) are \$10 each and the 27C512s that go in the link cards are \$5 each. This is to keep our costs (and ultimately yours) down.**