

## Motorola MotoTRBO Customer Programming Software (CPS)

Error Number#: 1687

Error Message: Unable to detect applicable device. Check to see if compatible programming cable is used.

### Troubleshooting Instructions

I have seen this error corrected by upgrading to the current CPS version when the customer was using a previous version. This may be quicker than going through the steps below.

There are several things that can cause this issue. Here are some things to verify.

1. Verify that the MOTOTRBO device is powered up properly. For a portable radio, verify that the battery level is not low. (On non display portable radio, when you press PTT if you get Flashing Red then that would mean that the battery is low.)
2. Disconnect the cable from both the device and the PC, reconnect using a different programming cable, and try again.
3. Try to reboot the PC and try again.
4. Verify that the cable is working and the ADS image is Ok. On subscriber they should hear 1-wire connect tone through the speaker (display models will also show a momentary message).
5. Launch the CPS. Connect the USB cable to the PC. Verify that the cable is securely connected to both the device and the PC. Make sure that only one MOTOTRBO device is connected to the PC.
6. Verify the driver installation. (Also available in Online Help with in CPS under Troubleshooting Section - Installing the MOTOTRBO Driver)
  - Exit ALL MOTOTRBO applications.
  - Right click on My Computer and go to Properties. Go to the Hardware tab and click on the Device Manager button.
  - Expand the Network Adapters node
  - Right click on the MOTOTRBO Radio #X node and open up the Properties.
  - Verify that the Device status says "This device is working properly." If yes, move on to Step 7 (Verify the Network Connections settings).

- If no, go to the Driver tab. Uninstall the driver. Power down the device. Disconnect the cable from the PC. Power up the device. Connect the cable to the PC. Reinstall the driver.

7. Verify the Network Connection settings. (Also available in Online Help with in CPS under Troubleshooting Section - Setting up the MOTOTRBO LAN)

- Open up the Network Connections from the Control Panel.
- Find the LAN connection associated with the Device Name "MOTOTRBO Radio #X."
- Right click on the connection and open up the Properties.
- Select the check box "Show icon in notification area when connected."
- Verify that the box "This connection uses the following items" has everything unchecked except for "Internet Protocol (TCP/IP)."
- Highlight "Internet Protocol (TCP/IP" and click on the Properties button.
- Click on the Advanced button.
- Check if the radio's IP address is detected by launching a command window. (Also available in Online Help with in CPS under Troubleshooting Section - Unable to Read Codeplug from/Write Codeplug to the Radio)
- Select the DNS tab.
- Make sure that "Register this connection's address in DNS" is not checked.
- Power down the device.
- Disconnect the device.
- Power the device up.
- Reconnect it to the PC and try again.

8. Check if the radio's IP address is detected by launching a command window (from Windows->Start->Run..., type "cmd" in the Run... dialog box) and typing in "ipconfig" in the command window.

- Verify that the connection for the LAN connection associated with your MOTOTRBO device appears in the list.

- Verify that this connection has valid values for IP Address and Default Gateway. By default this will be 192.168.10.2 and 192.168.10.1.

- In the command prompt, try to ping the device IP Address. For example, type "ping 192.168.10.1".

- Right click on the LAN connection notification icon associated with the device and select status. Verify that the Packets Sent and Received are not zero. Verify that the connection is Enabled. Press the button to toggle the device from disabled to enabled. (The button next to the Properties button should read "Disable". If this button says "Enable", click it.)

9. Check the route table to ensure that there are no conflicts.

- In the command prompt, type "route print".

- A table with Active Routes: should come up.

- Ensure that there is no conflict in the Network Destination column.

10. If you have any firewalls or anti-virus software installed, disable them. (Windows, ZoneAlarm, Black Ice, Norton, McAfee, etc.)

11. Try a different USB port.

12. Remove any LAN cables and other USB devices connected to the PC, disconnect the device, reset the device, and try again.

13. If all of the above fails, try another PC, if there is no issue using another PC with the same radio and cable, then there is something running on that PC that is interfering with the CPS.