



## README

### *for Setup of MultiVOIP MVP410-CF and MVP810-CF, CallFinders built on MultiVOIP Platform*

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This document describes a special interim version of Multi-Tech CallFinder products (MVP410-CF and MVP810-CF) that have been built on the platform of the corresponding analog MultiVOIP products (MVP410 and MVP810). The term "MVP-CF" will be used when referring collectively to both the MVP410-CF and the MVP810-CF.

### **Labeling of MVP-CF Cable Receptacles & Signal Channels**

The MVP410-CF has four channels and the MVP810-CF has eight channels. For each channel, there are two cable receptacles on the MVP unit. The larger receptacle, which is for E&M telephony (using RJ-45 connectors), is not used. The smaller receptacle, marked "FXS/FXO," *is* used and it accommodates RJ-11 connectors. The FXS/FXO receptacle can be connected to either

- (a) an analog DID line, or
- (b) the central-office Line port of a PBX, or
- (c) the analog station-port of a PBX.

1. Connect analog DID lines to the odd-numbered channels of the MVP unit (channels 1 & 3 of the MVP410-CF; channels 1, 3, 5, & 7 of the MVP810-CF). Use the FXS/FXO receptacle for each channel.
2. Even-numbered channels (channels 2 & 4 of the MVP410-CF; channels 2, 4, 6, & 8 of the MVP810-CF) will be used either as an FXS interface or as an FXO interface, depending on what that channel is connected to.  
  
If the channel is connected to a line port of a PBX, set the channel to FXS.  
  
If the channel is connected to the analog station port of a PBX, set the channel to FXO.
3. When a PBX line port is connected to the MVP channel, the FXS interface is used. DTMF digits coming in on this channel will be routed to an auto-attendant listening on the line port.
4. When a PBX analog station port is connected to the MVP channel, the FXO interface will be used and DTMF will be routed to direct extensions of the PBX.

## Technical Configuration Procedure

1. Turn on the power of the MVP-410/810-CF unit and wait for the boot light to go out.
2. The Command Cable has a DB25 connector at one end and it connects to the Command port on the MVP unit. The other end is a DB9 connector and it connects to the computer you are using to configure the MVP unit.  
NOTE: Because USB-to-Serial adapters sometimes cause problems, we recommend using a standard built in DB9 serial port when available.
3. Install the MultiVOIP software on the computer that you'll use to configure the MVP unit. You will be asked to designate an available COM port on your PC that your PC will use to communicate with the MVP unit. When prompted to 'Do you want to run the MultiVOIP configuration', click **Yes**.
4. After the configuration of the MVP unit has been read into the PC, the **Status** at the bottom right corner of the screen will be "Rights: Read/Write."
5. In the MultiVOIP software, go to **Configuration | Ethernet/IP**.
  - a. Enter IP Address.
  - b. Enter IP Mask.
  - c. Enter Gateway IP.
  - d. Click **OK**.
6. In the MultiVOIP software, go to **Configuration | Voice/Fax**.
  - a. In the **Selected Coder** field, choose "G.711 u-law."
  - b. In the **Advanced Features** group, uncheck "Silence Compression."
  - c. Click on the **Copy Channel** button. When the **Copy Channel** screen appears, click "Copy to All."
7. In the MultiVOIP software, go to **Configuration | Interface**. You will configure Channel 1 first and copy its configuration to all odd-numbered channels. Then you will configure Channel 2 and copy its configuration to all even channels.
  - a. Set the **Interface Type** field to "DID/DPO."
  - b. In the **DID Options** field group, set the **Start Modes** field to "Wink Start."
  - c. Click on the **Copy Channel** button. When the **Copy Channel** screen appears, select the odd channels (3, 5, and 7). Click **Copy**. Click **OK**.
  - d. In the **Interface Parameters** screen, in the **Select Channel** field, select "Channel 2."
  - e. Set the **Interface Type** field to FXS or FXO.  
If the channel is connected to a line port of a PBX, set the channel to FXS.  
If the channel is connected to the analog station port of a PBX, set the channel to FXO.
  - f. Click on the **Copy Channel** button. When the **Copy Channel** screen appears, select the even channels (4, 6, and 8). Click **Copy**. Click **OK**.

## Phonebook Configuration

8. *Example Situation Defined:* In the following steps, we will go through the software and enter values for the parameters that must be specified for the MVP-CF unit to operate correctly.

For clarity, we will use values from an **example situation**, as follows. *DID numbers in the range 763-717-7000 to 763-717-7010 have been obtained from the telco. In the PBX, we will route these directory numbers to extensions 7000 through 7010.*

To configure your own system, you must specify, for each parameter, the values required for your own system.

9. In the MultiVOIP software, go to **Phone Book | Outbound Phone Book | Add Entry**.

- a. Check "Accept Any Number."
- b. In the IP Address field, enter the IP address of the MVP410CF.
- c. In the **Protocol Type** field, select "SPP."
- d. Click **OK**.

10. In the MultiVOIP software, go to **Phone Book | Inbound Phone Book | Add Entry**.

- a. In the **Channel Number** field, select Channel 2.
- b. In the **Remove Prefix** field, enter the numeral **7**. *If you are connecting even-numbered channels to a CO port or a Line port, enter ,,7.* The two commas preceding the numeral 7 will cause a 4-second delay before the dialed digits will be sent to the auto-attendant. Because the caller hears ringback after dialing, he/she will not notice a delay in the call process.
- c. In the **Add Prefix** field, enter the numeral 7 also. *If you are connecting even-numbered channels to a CO port or a Line port, enter ,,7.* The two commas preceding the numeral 7 will cause a 4-second delay before the dialed digits will be sent to the auto-attendant. Because the caller hears ringback after dialing, he/she will not notice a delay in the call process.
- d. Click **OK**.
- e. Repeat steps 9a through 9d for the even-numbered channels (channels 4, 6, and 8).

- 10-alternate. **Alternate Mapping of DID Numbers.** Suppose the PBX uses 3-digit extensions and we want to route the incoming DID numbers (763-717-7000 through 763-717-7010) to extensions 200 to 210. In this case, the values in the Inbound Phone Book would be as follows:

Channel Number: 2  
Remove Prefix: 7000  
Add Prefix: 200  
Click **OK**.

As before, you would repeat this process for the even-numbered channels.

11. In the sidebar menu of the MultiVOIP software, choose **Save Setup** and select **Save and Reboot**. Then click on **OK**. The MVP-CF unit will then save the settings and reboot.

12. Connect a cable (RJ-45 on both ends) between the MVP-CF unit and the Ethernet network.

13. Connect cables between the MVP-CF unit and the telephony equipment. Connections to the MVP-CF unit use RJ-11 connectors.

14. If your test calls fail or if other problems occur, see the DID Troubleshooting Tips below.

## **DID Troubleshooting Tips**

1. On a DID line, Tip and Ring are polarity sensitive. Therefore, if the telco is seeing the DID line(s) coming into the MVP-410/810-CF as 'out of service,' you may need to reverse the inner two wires on each DID line.
2. You may connect an analog phone directly to channels 1, 3, 5, or 7 and dial an extension/DID number on the PBX. When a call is made, the analog phone should seize channel 2, 4, 6 or 8, send the digits to the PBX, and ring the extension. This is a good test to do before testing with the DID lines, try the analog phone in channels 1, 3, 5 and 7.

For Multi-Tech technical support, call 800-972-2439 and choose option 2.