

ICOM PHONE PATCH INSTALLATION AND OPERATING INSTRUCTIONS

GENERAL DESCRIPTION

The ICOM Phone Patch is used to connect a telephone circuit to any amateur radio station installation. The hybrid circuit provides a high degree of isolation between the receiver output and the transmitter input circuits, making it an ideal unit for use in voice-operated situations.

The AGC circuit in the patch regulates the output volume from the receiver and provides the proper volume for the telephone lines.

Section 97.79(d) states that "the licensee of an amateur station may permit any third party to participate in amateur radio communications from his station, provided that: a control operator is present and continuously monitors and supervises the radio communications to insure compliance with the rules."

The commission noted that this required a control operator to be on duty at all times during these operations. Furthermore, it said, all calls not initiated at an amateur station had to be screened by the control operator before being placed on the air.

Section 97.114 prohibits Amateur licensees from transmitting or delivering third party traffic "involving material compensation, either tangible, direct or indirect, to a third party, a station licensee, a control operator, or any other person" or delivering third party traffic consisting of business communications on behalf of any party.

INSTALLATION

1. You will need a telephone line duplex jack at or near your operating position so that you can plug in both a telephone for monitoring and operating while in the "patch" mode and to plug in the ICOM patch at the same time.
2. This phone patch may not be connected to party lines or to coin operated lines.
3. The Telephone Company may make changes in their facilities, equipment, operations or procedures that might affect the operation of this phone patch and if such changes are made, you may have to readjust the patch per the setup instructions.
4. Place the phone patch next to your transceiver so that the cables furnished will reach both the transceiver and the telephone jack.
5. Connect the cable with the 8-pin plug into the microphone input on the transceiver. Connect your microphone into the 8-pin jack on the front of the phone patch.
6. Connect the two-conductor cable into the jack provided in the back of the phone patch and the other end into the loudspeaker output jack on the transceiver.
7. Be sure the patch is turned "OFF" and plug the telephone cable into the telephone duplex jack. Check the telephone line to be sure that it is still working properly. If there are any problems, disconnect the cable immediately until the trouble has been located.
8. This completes the installation and the patch is ready to use after the adjustments have been made.

INITIAL ADJUSTMENTS

1. With the phone patch switch in the "O-F" position, make a radio contact with another amateur and ask his held in making your adjustments. Adjust the receiver gain for a comfortable listening level.
2. If you plan to use voice operation, adjust the VOX and anti-VOX controls on the transmitter for proper voice operation.

3. Set the "null" and "xmtr" controls on the patch to the midway position.
4. On the back of the phone patch there is a two-position slide switch. If your ICOM is a model 720, 730, or 740, or if the telephone signals are very weak, put the slide switch in the UP position. Put the slide switch DOWN for ICOM models 725, 745, 751 and 761, or if the incoming telephone signals are real strong.
5. Call a friend on the telephone and ask for his help while you conduct some tests.
6. With your friend on the line turn the patch "ON". This will disable the speaker and transfer the receiver audio into the phone line. It will also disconnect the microphone from the transmitter input and connect the phone line audio to the transmitter input. The station operator must use the telephone for both listening and transmitting.
7. With receiver gain turned down, have your friend on the phone talk in a normal voice and adjust the "XMTR" control for normal modulation on the transmitter. You may also have to adjust the microphone gain control on your transmitter. With the VOX turned on, increase the receiver gain until the signal from the receiver trips the VOX. Rotate the null control until the signal no longer trips the VOX. An area will be found where the received signal no longer trips the VOX. Set null control in the center of this range.
8. Check to see that the VOX circuit is properly energized when the party on the telephone speaks. Turn the patch off when you have completed your adjustments.
9. If VOX operation does not work well you may prefer to use "push to talk." The push-to-talk button on the microphone can be used to transmit the telephone incoming audio and you will have to determine who is going to talk and who is going to listen.
10. Turn the patch off when you have completed your tests.

OPERATION

1. If you are asked to make a phone patch by another amateur, get the phone number and call the party on the telephone. Explain that he or she will be "on the air" when speaking. When a person is using the patch for the first time, explain the basic procedures involved in either voice-operated transmission or push-to-talk operation and that only one party may speak at a time.
2. Once the party has been contacted and the explanations completed turn the switch on the patch to "ON." This will automatically feed the receiver audio into the phone line and transfer the phone line audio to the transmitter input. It will also disable the station microphone and loudspeaker and transfer these functions to the station telephone. (Except the push-to-talk button will still be connected.)
3. The station operator will have to listen and speak on the telephone in order to carry on a conversation. Using VOX, the operation of the patch is automatic and people will quickly become accustomed to the pause in the conversation so that they may listen or answer at the proper time.
4. In a push-to-talk situation the station operator will have to follow the conversation more closely to know when to press the transmit button and when to let the remote station take over.
5. When the patch is complete, turn the patch "OFF." With the patch off you can resume contact with the other Amateur in the normal manner.

There are a few important rules to follow regarding the use of a phone patch.

1. After contacting the party on the telephone, explain some of the rules regarding using an amateur radio station such as no profanity, no commercialism, etc.
2. Do not allow dial tones, dial clicks or telephone operators' voices to be transmitted.
3. Do not jeopardize your license by accepting commercial calls or using other improper operating procedures.

4. Keep the phone patch switch in the "OFF" position at all times except while actually handling phone patch traffic.
5. If trouble occurs, disconnect the phone patch from the telephone line.
6. This phone patch was manufactured by the Wm. H. Nye Co., Inc., expressly for ICOM America, Inc.

ICOM LIMITED WARRANTY

ICOM, Incorporated is proud of the technology within and workmanship quality of its products.

ICOM AMERICA, INC., the authorized ICOM Distributor, warrants this ICOM amateur radio to be free from defects in material or workmanship for a period of 90 days from the date of purchase. The authorized distributor will, at its option, replace or repair parts found defective and return the equipment or parts to the purchaser.

The above-stated warranty and undertaking to repair does not apply to an ICOM amateur radio which has failed due to improper installation, misuse, accident, alteration or unauthorized repair or modification.

The purchaser is responsible for the transportation costs of the equipment to and from the distributor for the warranty or repair set out above.

The above warranty does not include incidental or consequential damages and the distributor disclaims any liability for any such damages. All implied warranties, if any, are limited in duration to the above-stated 90-day warranty period. In the United States, some states do not allow the exclusion or limitation of incidental or consequential damages or on how long an implied warranty lasts, so the above limitations may not apply to you.

The completion and return of the enclosed registration card is a condition precedent to the warranty coverage and the above undertaking to repair. This warranty gives you specific legal rights and you may also have other rights which vary from state to state or province to province.

