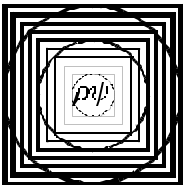


TV / CATV / FM Tuner User's Manual

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PRAGMATIC COMMUNICATIONS SYSTEMS, INC.

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Introduction

Description

The Pragmatic CATV tuner module provides a convenient and independent module for the tuning of both broadcast and cable TV frequencies for a variety of applications needing an external and independent tuning module. Several outputs are provided. The first output is for a standard composite video output. An optional output provides S-video output. The tuner also includes an MTS stereo decoder, and the audio is brought out to left and right stereo audio outputs.

An optional FM tuner is also available, for reception of the broadcast FM stereo band (88 to 108 MHz). The stereo audio outputs are automatically switched between the FM audio and TV audio as needed.

Channel selection is accomplished by IR remote control. A front panel LCD display shows the selected channel number.

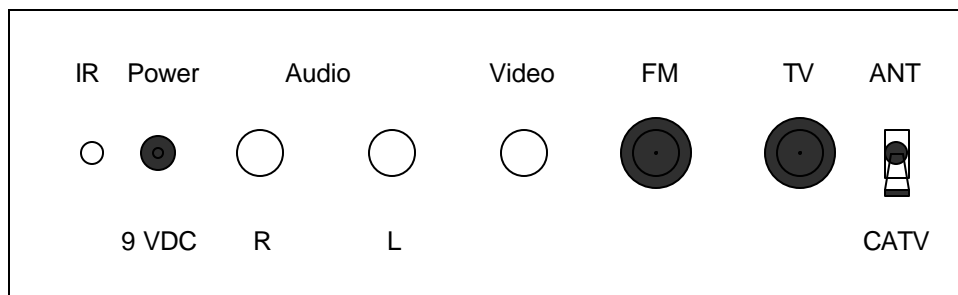
Features

- VHF/UHF broadcast TV tuner (channels 2 to 69)
- 99-channel cable tuner
- optional FM tuner
- IR remote control
- MTS stereo decoder
- composite video output
- optional S-video output
- LCD display

Installation

Important!

⇒ All connections should be made with the power turned **OFF!**



Installation is very straightforward.

- 1.) Connect the cable TV signal or the antenna lead to the RF input F connector, and set the selector switch to either "ANT" or "CATV" as needed.
- 2.) As needed, connect an FM antenna to the FM RF input F connector.
- 3.) If the external IR detector module is used, then connect it to the IR input connector. (If the tuner has an internal IR detector, then the external detector is not used.)
- 4.) All audio/video outputs are provided on RCA connectors. Connect the audio/video outputs to the destination equipment. (Note: If the tuner only has Mono audio available, the Mono audio signal is available at **BOTH** audio outputs, for ease in interfacing to a stereo amplifier.)
- 5.) Finally, connect the power supply to the power input. (Use supplied transformer only.)

Remote setup

The tuner allows for one of two different IR code sets to be selected by a jumper setting (see jumper settings page for details.)

If the first (default) code set is selected, there is no setup required on the remote, because the channel control commands use the default settings (TV mode, code=000).

If the second code set is selected, then the remote needs to be setup in "Cable" mode, code = 029. To do this, press and hold the "Code Search" button until the red LED stays lit. Then, press the "Cable" button to select the mode. Then enter in the code value, 029, by pressing those three digits on the numeric keys. After the third digit, the LED turns off and the remote returns to the operational mode.

If the user desires to control the tuner using a learning remote, such as the Marantz RC-2000 or similar, then follow that remote's instructions to transfer the control codes from the RCA remote to the learning remote.

Operation

TV Channel selection

To select a TV channel, just enter the two digits, such as "27". The new channel number is then selected as soon as the second digit is entered. In cable mode, all channel numbers 1 to 99 are valid; only 00 is invalid and will be ignored. In ANT mode, only channel numbers 2 to 69 are valid; invalid channel numbers are ignored.

FM frequency selection

To switch from TV mode to FM mode, first press the "Enter" key, then enter in the 3 or 4-digit FM frequency, such as "965" for 96.5 or "1013" for 101.3 MHz. Note that the decimal point is not entered, since it doesn't exist on the remote. The valid frequency range is from 87.7 up to 107.9 MHz.

While in FM mode, it is not necessary to press the "Enter" key before the frequency; just enter in the new frequency to be selected. Of course, it doesn't make any difference if the "Enter" key is pressed first.

To change back from FM mode to TV mode, enter in the two-digit channel number, such as "12", then press the "Enter" key. The new TV channel is then selected. In other words, to select the FM mode, the "Enter" key is pressed **BEFORE** the frequency is entered, but to select the TV mode the "Enter" key is pressed **AFTER** the new channel number is entered.

Jumper settings

JP5 -- IRC/HRC selection

OPEN = IRC (default)

CLOSED = HRC

Most cable systems use "IRC" for the channel frequencies. Some cable systems use "HRC" for the channel frequencies.

JP6 -- Code set selection

OPEN = TV code 000 (default)

CLOSED = Cable code 029

The tuner allows for one of two different IR code sets to be selected by this jumper setting. Select the best one for the application, and program the remote to match the selected code setting.

Note: the setting of JP6 has absolutely nothing to do with whether the tuner is receiving broadcast TV frequencies or cable frequencies; as that is controlled by the rear panel switch. The "TV" and "Cable" selections listed here refer to the mode settings on the RCA remote. In other words, it is entirely possible to have the rear panel switch set to "CATV" for the tuner to receive cable frequencies, but JP6 is left open so that the IR code set is controlled by the "TV" mode of the RCA remote, and the tuner will tune to all cable channels 1 to 99, as selected from the remote control.

Troubleshooting hints

Symptom: No video, or no audio.

Possible causes:

It has been our experience that almost all problems encountered are due to improper connections at either the input signals, or the output signals. Therefore, the first step is always to review all of the connections, and make sure that all input/output connections are correct, as well as making sure that all of the equipment has the proper power applied.

Symptom: IR control doesn't work.

Possible causes:

1.) Check the batteries in the remote. Check to make sure the remote is set to the proper mode and that the proper device code has been set.

2.) Make sure that the detector module has been installed properly, and that it is not being overwhelmed by florescent lights.