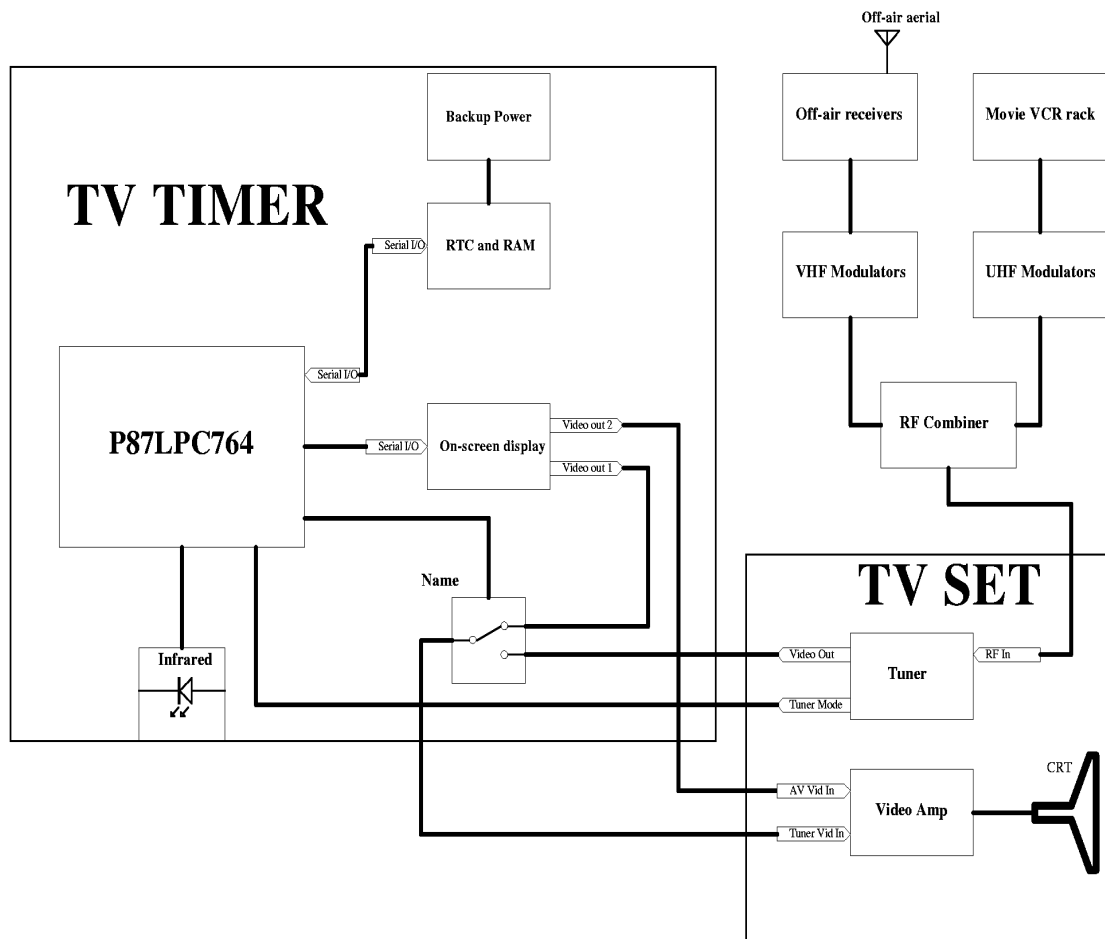


# 1. Block diagram and operation



The block diagram shows a possible configuration of the *TV Timer* system. Local television stations are picked up by off-air receivers and remodulated to the VHF band. A rack of VCRs playing movies are modulated to the UHF band. The outputs of the modulators are combined and distributed throughout the building via RF cabling.

Modified television sets pass the video output of the tuner through a *TV Timer* unit. The enabled time is set by an infrared remote-control. A real-time clock stores the enabled time and keeps track of the elapsed time. When the power is off, backup-power, from a super-capacitor, keeps the clock running. If the time has expired, the main processor senses when the tuner is receiving the 'pay' band, and blocks the video.

The *TV Timer* uses the on-screen display as a status display when the television is switched to AV mode, and also as a 'channel locked' display when the video is blocked.

Operation of the *TV Timer* with the remote-control is very simple. The remote-control has only six buttons; HOURS-UP, HOURS-DOWN, DAYS-UP, DAYS-DOWN, ON/XMIT, and OFF. The time is set with the HOUR and DAY buttons, and displayed on the remote-control liquid-crystal display. The XMIT button is used to transmit the time to the device. The *TV Timer* then replies to the remote-control, which responds with an audible beep, to confirm that the command has been accepted.