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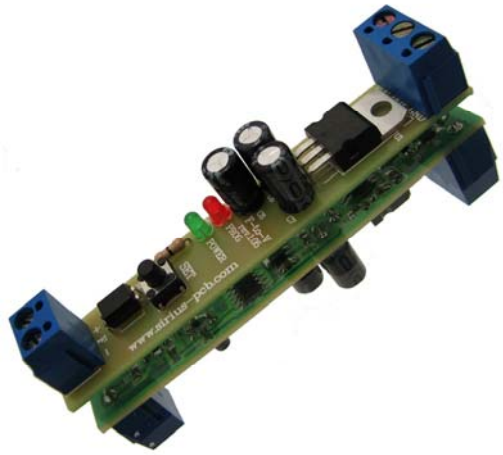
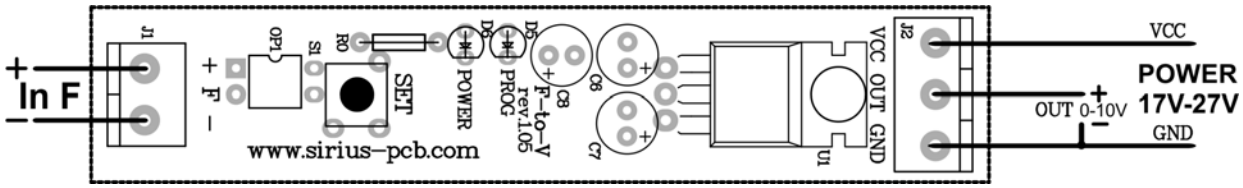
Converter of frequency in to power supply voltage

F to V rev.105 №100740



The device is used for converting of frequency in to power supply voltage, it finds its destination in industry in controlling of frequency invertors etc. It is constructed on the base of the microcontroller PIC16F1705 I/SL.

- *Power supply voltage DC 15-24V*
- *Input frequency 0÷500 Hz*
- *Output power supply voltage 0 - 10V/100mA MAX*
- *Resolution 256 feet*
- *Voltiac separated input to the frequency*
- *Button for setting maximum input frequency to output of 10V (maximum frequency set accumulates in energy autonomus memory of the microcontroller)*
- *LED indication for Programming on mode*
- *LED indication for switched on power supply voltages*
- *Size: 85mm x 15mm*



Description:

- *Input - impulses at a frequency in the range 0÷500 Hz*
- *Output - analog signal from 0 to 10V with 256 feet, proportionally to the input frequency*
- *Red LED D5 for indication of power on mode*
- *Green LED D6 for switched on power supply*
- *The input frequency expands proportionally to the output in 256 feet (or 0.392V/ft), for example:*

if at maximum input frequency 500 Hz to the output there are 10V so at 250 Hz there are 5V, at 50 Hz thre is 1V

- *Power supply voltage at the input to frequency 5V*
- *To terminal **J1** it is powering on the input frequency (it is important the polarity to be kept), to terminal **J2** to pin VCC is powering on + and to pin GND – (ground) to the power supply voltage and the output power supply voltage forms at pin OUT + and GND – with maximum current 100mA*

Functions:

- *after switching on the power supply if there is programmed on maximum frequency the red LED shortly lights on; after that the convertor is powering on*
- *if there is not programmed on maximum frequency the convertor is powering on with such per default, the diod will flash only if there is powered on input frequency*
- *in transmission of input impulses the red LED quickly flashes (at frequency 4 Hz)*
- *at interruption to the transmission of impulses LED lights off after a test interval and the output is to 0V*
- *if it is not programmed on by the user on the convertor it is set per default maximum input frequency to 500 Hz*
- *when the convertor is not set on any maximum frequency (for example in unsuccessful procedure in setting) the red LED slowly flashes*

(at frequency 1 Hz) and the output is always to 0V

Procedure of setting on maximum input frequency that it transmits output of 10V:

- *switch off the operated machine if you do not want it receives controlling signal*
- *transmit maximum frequency to the input which you will control with, be certain it is reached and sable*
- *push and hold for more than a half of a second, the button for programming on; the red LED has constantly to light on brightly*
- *after terminating the procedure in memorising the maximum input frequency the diod lights off after that it starts flashing quickly this time,*

i.e. the convertor is already in power on mode, to the output it has to transmit 10V as maximum of the input frequecy is supplying

- *you can already switch on the operated machine and to regulate it at variation of frequency to the input impulses*

Thank you for choosing us!