

# Operating Instructions for TCS TXM-D Crystal Motor for Krasnogorsk K-3

The TXM-D (a.k.a. TXM-13) is nearly identical in operation to the later model TXM-20.

## Exceptions:

Speeds are limited to 12, 24 and 48 frames per second. Of these, 12 and 24 are 60 Hz HMI compatible; none are 50 Hz HMI compatible.

To use the external Milliframe Controller accessory, the speed switch must be set to "MC."

For technicians: Milliframe Controller connections are as follows. Pin 6 is unswitched 12 V DC output, pin 8 is 3200 pulses per frame 5 volt logic symmetrical square wave input, and pins 5 and 9 and the shell are negative ground.

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