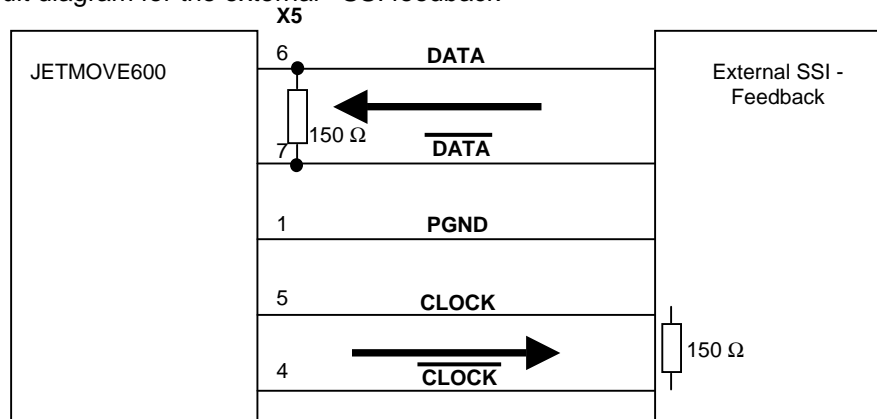


# Application Note

Date: 05.02.2001

## Positioning with external SSI – Feedback

Circuit diagram for the external SSI feedback



Settings for the external SSI – Feedback:

(a terminal program or the terminal- from the MMI is necessary)

<b>DIS</b>		Disables drive by the software
<b>EXTPOS 1</b>		Position feedback → by external feedback
<b>GEARMODE 7</b>		choice of the measurement system → SSI
<b>ENCMODE 2</b>		Emulation mode of the ROD / SSI (for GEARMODE=7 always 2 with SSI – feedback )
<b>SSIGRAY 0</b>	or 1	Data format of SSI protocol (0=binär/1=gray)
<b>SSIINV 0</b>	or 1	transmission first MSB (=0) or LSB (=1)
<b>SSIMODE 0</b>		Alarm bit at first (=1) last (=2) or without (=0)
<b>SSIOUT x</b>		x = Data bits +1
<b>EXTMUL y</b>		Internal Multiplier:

$$y = \frac{2^z}{\text{Feedback\_resolution\_in\_increments}}$$

z = PRBASE ( Default 20, optional 16 )

<b>SAVE</b>	saves data to EEPROM
<b>COLDSTART</b>	restarts the controller to activate the changed parameters

# Application Note

## How to set the reference point

A reference motion task is not possible, because the feedback system is an absolute measurement system.

To set the reference

- Read out the actual position with the command **PFB** and the terminal – window or a terminal program.
- Set command **ROFFS** (with this value and inverted sign).
- Save this data with command **SAVE** and restart the drive with command **COLDSTART**.
- **PFB** should show the value 0 now .