

Axis and rate coding output

The receiver presents axis selection and magnification as parallel signal lines. Two output models are available; confirm which your control expects before wiring. Model A is the default for Fanuc, Mitsubishi and Syntec MPG ports; Model B is used where the control decodes a binary axis word.

MODEL A Non-coding output: one dedicated line per position

RATE	1X	10X	100X	AXIS	X	Y	Z	4	5	6
1X	1	0	0	OFF	0	0	0	0	0	0
10X	0	1	0	X axis	1	0	0	0	0	0
100X	0	0	1	Y axis	0	1	0	0	0	0
				Z axis	0	0	1	0	0	0
				4 axis	0	0	0	1	0	0
				5 axis	0	0	0	0	1	0
				6 axis	0	0	0	0	0	1

Exactly one line is active per selector position. With the selector at OFF, all axis lines are low and the handwheel produces no pulses.

MODEL B Encoding output: three lines carry the axis word

RATE	1X	10X	100X	AXIS	X	Y	Z
1X	1	0	0	OFF	0	0	0
10X	1	1	0	X axis	1	0	0
100X	0	1	0	Y axis	1	1	0
				Z axis	0	1	0
				4 axis	0	1	1
				5 axis	1	1	1
				6 axis	1	0	1

RECEIVER TERMINALS

HA / HA- / HB / HB- Handwheel A/B quadrature, differential pair to the control MPG port.	ESTOP1 / ESTOP2 Emergency relay dry contact. Series into the machine emergency chain.
EN1 / EN2 Enable (deadman) contact. Closed only while the button is held.	K1 / K2 / K3 Extension key outputs, user-assignable to spare control inputs.
+24V / 0V Receiver supply from the machine cabinet, 24 VDC nominal.	ANT External antenna, SMA. Advanced receivers only.

MOUNTING CAUTION

To guarantee proper operation at distance, mount the Basic receiver (or, on Advanced units, the external antenna) on top of the chassis, not inside it. A closed steel cabinet attenuates the 433 MHz link and reduces usable range well below 50 m.

