



NanoScope[®]
Scanning Probe
Microscopes

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Pinouts on Digital Instruments' SPM Heads and Scanners

<i>Pin</i>	<i>Wire Color</i>	<i>Wire Color</i> (15 pin connectors with black jacketed cable)	<i>AFM Head</i>	<i>LFM Head</i> (For LFM base)	<i>Multimode Head</i>	<i>AFM, LFM, & Multimode Scanners</i>	<i>Dimension Head</i>
1	Black	Black	Laser Gnd.	Laser Gnd.	Laser Gnd.	Z Piezo Gnd.	Laser Gnd.
2	Brown	Brown	Preamp Gnd.	Preamp Gnd.	Preamp Gnd.	Shield	Tilt Switch
3	Red	Red	Laser +5 V.	Laser +5 V.	Laser +5 V.	N.C.	+15 V.
4	Orange	Orange	LED (+)	LED (+)	LED (+)	Y+	Y+
5	Yellow	Yellow	+15 V.	+15 V.	+15 V.	Y-	Y-
6	Green	Green	LED (-)	LED (-)	STM	Z+	Tapping Piezo
7	Blue	Blue	-15 V.	-15 V.	-15 V.	Piezo Cap	Case Gnd.
8	Violet	Violet	Out B	Out B	Out B	X+	STM
9	Gray	Gray	Out A	Out A	Out A	X-	Out A
10	White	White	.	Out C	Out C	.	Preamp Gnd.
11	White/Black	Clear	.	Out D	Out D	.	Out B
12	White/Brown	Tan	.	Preamp Gnd.	"Extra" Wire	.	Z+
13	White/Red	Rust	.	N.C.	Case Gnd.	.	-15 V.
14	White/Orange	Light Green	.	N.C.	Tap. Piezo (-)	.	X+
15	White/Yellow	Light Blue	.	N.C.	Tap. Piezo (+)	.	X-
16	White/Green	.	.	.	.	.	Z-
17	White/Blue	.	.	.	.	.	Laser +5 V.
18	White/Violet	.	.	.	.	.	SPM Tip
19	White/Gray	.	.	.	.	.	Out C
20	Blk/Wht/Brn	.	.	.	.	.	Z Piezo Gnd.
21	Clear or Blk/Wht/Red	.	.	.	.	.	Out D

ELCO 9034 connector on
the STM scanner



The pins are female socket
pins on the base the plug
has the opposite connections.