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Subject: NB Labs Multichannel Electrodes and Headstages.

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Larry Andrews
President/NB Labs
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PUBLISHED PAPERS USING NB LABS PRODUCTS

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Association for Research in Otolaryngology, Midwinter Meeting, 1996

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F.X. Guyette, A.J. Uzwiak, M.O. West and L.L. Peoples

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552.7 NEURAL POPULATION ACTIVITY IN SENSORIMOTOR CORTEX CAN CONTROL AND EXTERNAL "ARM" MOVEMENT SYSTEM.
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Laura M.O. de Oliveira, Marshall G. Shuler, Suzette G. Casal, Miguel A.L. Nicolelis

700.5 ROLE OF SI CORTEX IN RECEPTIVE FIELD REORGANIZATION IN VPM THALAMUS FOLLOWING PERIPHERAL DEAFFERENTATION.

D.J. Krupa, AA. . Ghazanfar and M. A.L. Nicolelis

700.6 SUBCUTANEOUS PERIORAL INJECTIONS OF CAPSAICIN CAUSE IMMEDIATE REORGANIZATION OF MULTI-WHISKER RECEPTIVE FIELDS IN ANESTHETIZED RATS.

S.A. Simon, Donald B. Katz, Psyche Lee and Miguel A.L. Nicolelis

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L.M. Kay and G. Laurent

913.6 CORTICO-THALAMIC INTERACTIONS IN RESPONSE TO WHISKER STIMULATION IN A COMPUTER MODEL OF THE RAT BARREL SYSTEM.

K.A. Moxon and J.K. Chapin

926.7 THE NEURONAL AND BEHAVIORAL CORRELATIONS IN MEDIAL FRONTAL CORTEX AND NUCLEUS ACCUMBENS DURING COCAINE SELF-ADMINISTRATION IN FREELY MOVING RATS.

J.Y. Chang and D.J. Woodward

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P.H. Janak and D.J. Woodward

LARRY ANDREWS
1918 AVE A
DENISON, TEXAS 75020

NB LABS
HEADSTAGES
AMPLIFIER

HD-16

FEATURES

* JFET Source Follower
* Low Noise
* 8 Channel Single or
  16 Channel Double
* DB25 Connector Provided
  (if required)

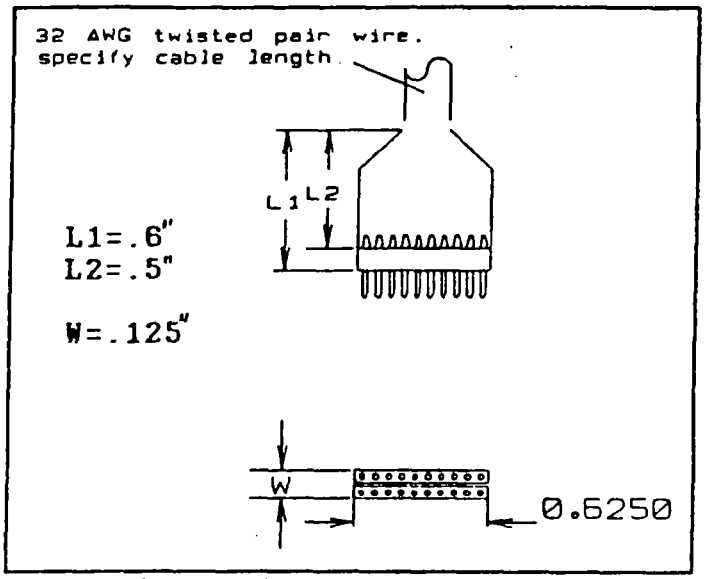
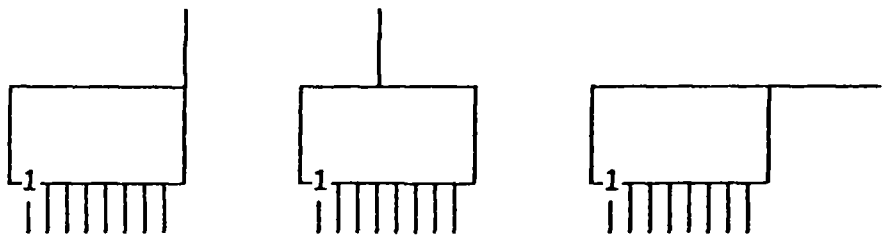


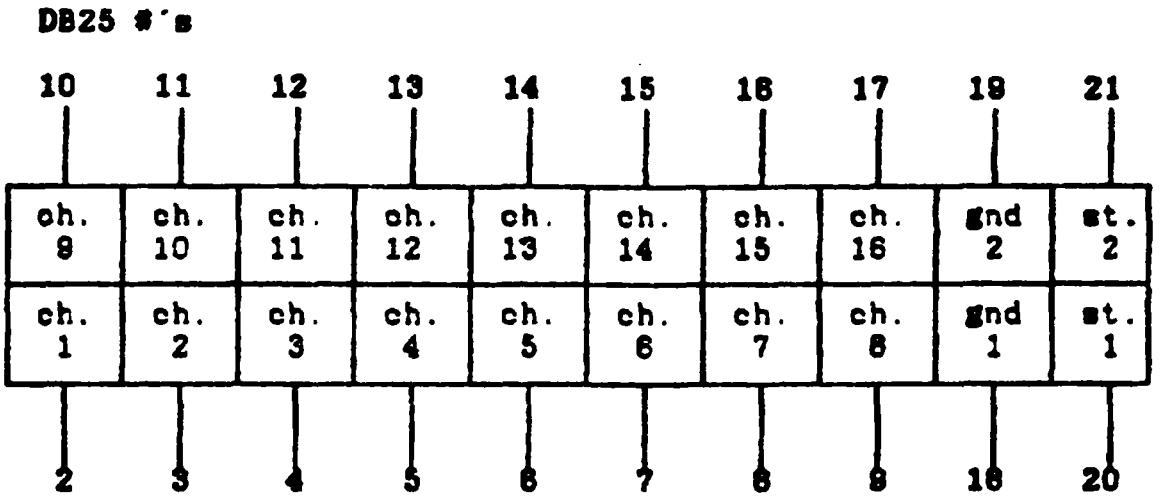
Figure 1. Headstage dimensions.

Headstage can be built 3 ways.



NB Labs
1918 Ave A
Denison, Texas 75020

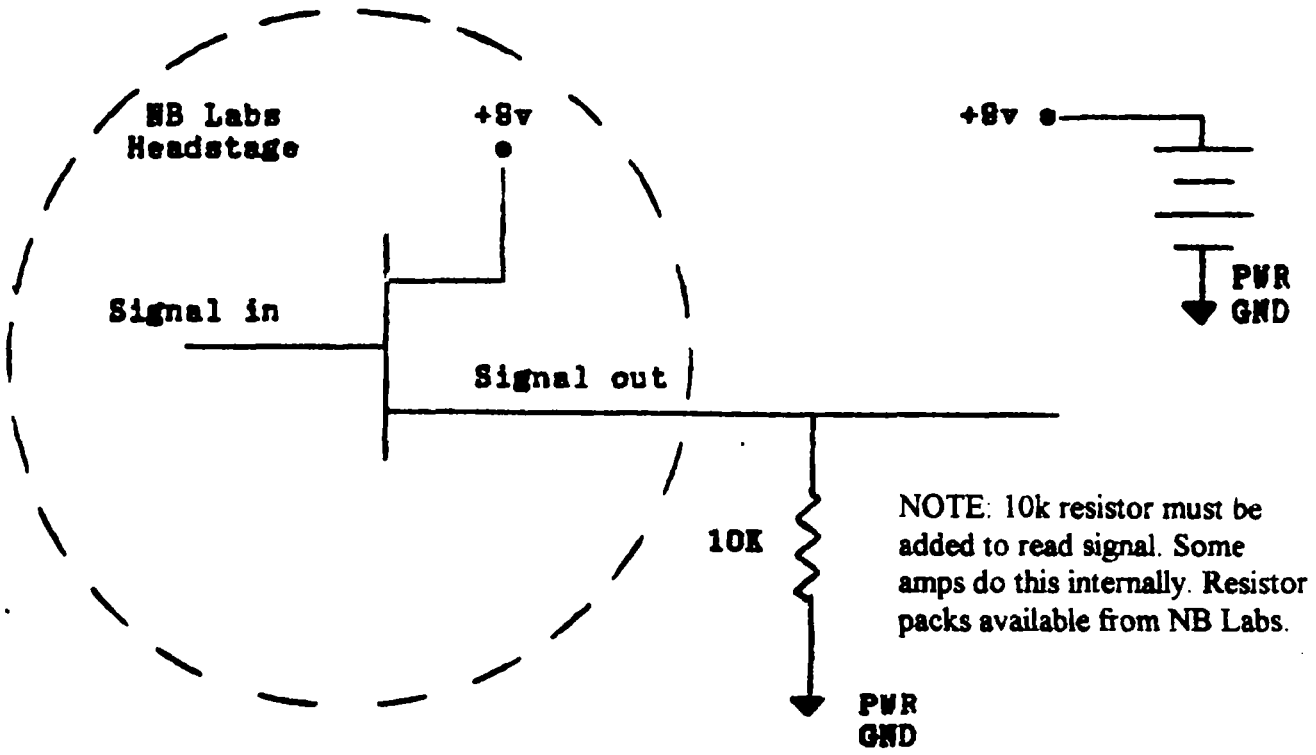
16 CHANNEL JFET HEADSTAGE



Ch. 1 - 16 have JFETS.

The ground and the stimulation channels don't have JFETS.

NOTE: VDD + 8v or 12v (DB25 #1)



NOTE: 10k resistor must be added to read signal. Some amps do this internally. Resistor packs available from NB Labs.

LARRY ANDREWS
NB LABS
ELECTRODE ARRAY PATTERNS

Each dot represents a 50 micron wire channel and its position in the array. This is not the actual size of the array, just a representation.

. . .
. . .
. .
2x3x3
8 Channel

For small areas. Unlike bundles, you know which wire is which channel using this design.

. . . .
. . . .
2x4
8 Channel

For small narrow areas. The distance between rows and individual wires can be varied to fit need of the user.

. . . . . .
1x8
8 Channel

For thin areas. Also can be cut at an angle.

. . . . . .
. . . . . .
2x8
16 Channel

For long narrow areas. Each row can be the same length or cut at different lengths or angels.

NB Labs Products

8 CHANNEL ELECTRODES

	Bundles	P/N	COST
o	Ground wire	SB103	$40.00*
o	Both ground and stimulation wire	SB 104	$42.00
	Arrays		
o	Ground wire	S103	$50.00
o	Both ground and stimulation wire	S104	$52.00

8 CHANNEL CONNECTOR

ch. 1	ch. 2	ch. 3	ch. 4	ch. 5	ch. 6	ch. 7	ch. 8	gnd 1	st. 1

16 CHANNEL ELECTRODES

	Bundles		
o	No ground or stim. wire	DN101	$55.00
o	Ground wire, no stim. wire	DN103	$57.50
o	Both ground and stim. wires	DN104	$59.00
	Arrays		
o	No ground or stim. wires	D101	$70.00
o	Ground wires	D103	$72.00
o	Both ground and stim. wires	D104	$75.00

16 CHANNEL CONNECTOR

ch. 1	ch. 2	ch. 3	ch. 4	ch. 5	ch. 6	ch. 7	ch. 8	gnd 1	st. 1
ch. 9	ch. 10	ch. 11	ch. 12	ch. 13	ch. 14	ch. 15	ch. 16	gnd 2	st. 2

PROTECTION CAPS and CONNECTORS		P/N	COST
o	Mating male connector - Single	CS101	$7.50
	Double	CD101	$15.00

JFET HEADSTAGE

o	4 Channel (6 pin)+	HS4	$175.00
o	8 Channel (10 pin**)	HS8	$295.00
o	16 Channel (Duel 10 pin)	HD16	$495.00

HEADSTAGE OPTIONS

LED's $110.00

Copper Shield $75.00

RP1 - 8 channel resistor pack $50.00

RP2 - 16 channel resistor pack $70.00

Headstages have up to 60" of #32 twisted pair wire and optional DB25p connector.

* All prices are for Stainless Steel 50 micron diameter wire, Teflon coated.

\+ 4 channel electrodes are also available. Call for prices.

** 10 pin connector, approx. .070" x .625".

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