

ERIE COUNTY TECHNICAL SCHOOL

PROPOSED AGENDA ITEM

DATE: November 22, 2005

SUBJECT: Electronics equipment bid award

INITIATED BY: Paul Fritz, Business Manager

DESCRIPTION:

Bids were received November 11, 2005 for Electronics training equipment. The funds are budgeted in the Perkins Secondary Allocation grant.

Bids were solicited from:

1. Electronix Express RSR Electronics, Avenel, NJ
2. Allegheny Educational Systems, Natrona Heights, PA
3. Comtech Associates, Somerset, NJ

Bid specs and bids- attached

Only one bid proposal was received from Electronics Express.

RECOMMENDATION:

Motion to award the Electronics equipment bid award to Electronics Express of Avenel, NJ in the amount of \$12,180.00 for a quantity of 12 units of each item, per the bid specifications.

ELECTRONIX EXPRESS
R.S.R. ELECTRONICS, INC.
 365 Blair Road
 Avenel, New Jersey 07001
 (732) 381-8777, Email: sales@eleexp.com

VIC@ELEEXP.COM
 800.972.2225
 EXT. 116

3. PRICING BID FORM

Item- part number	Quantity - 6	Quantity - 12	Quantity - 18	Quantity - 24
Oscilloscope – part number 01BK2120 <i>ORIGINAL AS SPECIFIED</i> <i>2 YR. WARRANTY</i>	\$ <i>359.00</i>	\$ <i>353.00</i>	\$ <i>350.00</i>	\$ <i>344.00</i>
Function Generator – part number 01FG4011 <i>ORIGINAL AS SPECIFIED</i> <i>2 YR. WARRANTY</i>	\$ <i>264.00</i>	\$ <i>253.00</i>	\$ <i>249.00</i>	\$ <i>243.00</i>
Digital Multi-meter – part number 01DM926 <i>ORIGINAL AS SPECIFIED</i> <i>1 YEAR WARRANTY</i>	\$ <i>47.00</i>	\$ <i>46.00</i>	\$ <i>45.00</i>	\$ <i>44.00</i>
Power Supply – part number 01PS1652 <i>ORIGINAL AS SPECIFIED</i> <i>1 YR. WARRANTY</i>	\$ <i>368.00</i>	\$ <i>363.00</i>	\$ <i>360.00</i>	\$ <i>352.00</i>
Total bid price	\$ <i>1,038.00</i>	\$ <i>1,015.00</i>	\$ <i>1,004.00</i>	\$ <i>983.00</i>

Attach a complete description of any additional costs not included above.

6228.00 12180.00 18072.00 23512.00 / PR
NO ADDITIONAL COSTS

4. SIGNATURE

Having carefully reviewed the Bid Specifications supplied by Erie County Technical School and being completely familiar with all requirements and conditions set forth, the undersigned agrees to supply all materials and services required for the project. The undersigned further acknowledges the right of Erie County Technical School to reject any and all bids and to waive any defect in form. The undersigned further certifies that this bid was prepared independently and without collusion with any known bidders in compliance with the Pennsylvania Anti-Bid-Rigging Act.

Firm Name *ELECTRONIX EXPRESS*

Address *365 BLAIR RD.*

City, State, Zip Code *AVENEL, NJ 07001*

Phone *800.972.2225 EXT. 116*

By *Vic Neumark*

Title *MARKETING MANAGER*

Signature *Vic Neumark* Date *11/7/05*

Erie County Technical School
8500 Oliver Road, Erie, PA 16509-4699
814-864-0641
www.ects.org
An equal rights and opportunities school

October 20, 2005

To all bidders:

The Operating Committee of Erie County Technical School is seeking bids for:

Electronics Program Training Equipment

Bids must be received no later than 12:00 Noon, November 11, 2005.

Bids are scheduled to be awarded at the November 22, 2005 Operating Committee Meeting.

1. GENERAL SPECIFICATIONS

- A. All bids must be submitted in a sealed envelope labeled 'Erie County Technical School-Equipment Bid' and delivered to Paul Fritz, Business Manager, Erie County Technical School, 8500 Oliver Road, Erie, PA 16509-4699.
- B. The Erie County Technical School reserves the right to reject any or all bids and to waive any formalities in conjunction with the bid, retains the right to evaluate bid items as they are intended for use, to select the equipment, supplies, or services which represents the best value regardless of price. Any interpretation of equivalency shall be determined finally by the Operating Committee of the Erie County Technical School.
- C. No purchase contract shall exist between the bidder/seller and Erie County Technical School until the properly executed purchase orders, including all pertinent terms, conditions, specifications, drawings and/or other attachments are issued to the bidder/seller by Erie County Technical School.
- D. The successful bidder will be awarded the contract upon approval of the Operating Committee of Erie County Technical School.
- E. Bidders shall not take advantage of any errors, inconsistencies or omissions in the specifications. Bidders will be obliged to promptly notify Erie County Technical School of the same prior to the time set for the bid opening.
- F. All bids must be typed or handwritten in permanent ink on this document as the Bid Form and must be properly signed with original signatures. Changes or alterations in the bid specifications or conditions of such automatically disqualify the bid.
- G. No bidder may withdraw a bid for a period of **60 days** after the date set for the awarding thereof, nor may a bidder set a sooner expiration date on a bid other than stipulated herein.

- H. All items on this bid must be New, which shall mean first-time usage. All items on this bid shall be of current manufacture, which shall mean the most recent line of the times being made available to the bidder by the manufacturer, including the most recent release of any software under which the equipment operates.
- I. Bids shall include the complete fabrication, finishing, delivery and installation ready for use all in accordance with these specifications. Any part or accessory not specifically mentioned herein, which is normally part of the equipment or necessary to complete installation of same, shall be included in the bid price.
- J. Standard of Quality: The various materials and products specified in the specifications by name or description is given to establish a standard of quality and of cost for bid purposes. It is not the intent to limit the acceptance to any one material or product specified, but rather to name or describe it as the absolute minimum standard that is desired and acceptable. A material or product of lesser quality would not be acceptable. Where proprietary names are used, whether or not followed by the words "or as approved equal", they shall be subject to equals only as approved by our architect and/or engineer, or other responsible party.
- K. No cash allowance: No cash allowances for any purposes are included in the specifications of this project.
- L. The bidder shall have the responsibility for loss or damage in shipment, delivery and installation of all equipment, parts and goods until time of transfer or acceptance by Erie County Technical School.
- M. The bidder shall exercise reasonable care to avoid any damage to the owner's property and shall be responsible for any repair of any such damage.
- N. **Bidder warrants that each piece of equipment and software shall be free from defects in material and workmanship for a minimum period of twelve (12) months from the date of acceptance and is fit for the purpose intended. Bidder further warrants that it will, at bidder's expense, fix, repair or replace the equipment or any part thereof through the warranty term. Warranty shall include on-site service. Warranty information and description must be included with the bid submission.**
- O. **Payment: Supplier will be paid 100% of the contract price upon acceptable receipt of all items as determined by the school ECTS Business Manager.**
- P. Acts 34 and 151: The contractor, sub contractors, and material suppliers, and employees of same, who may be coming in direct contact with children shall be required to comply with the provisions of Act 34 of 1985 and Act 151, both pertaining to criminal and child abuse history. Proper certification of compliance shall be placed on file in the office of the Business Manager prior to any employee working on the premises of the school.

- Q. Suppliers should be aware that donations of equipment to Erie County Technical School can be made through our Erie County Technical School Foundation which is a charitable organization under section 501(c) (3) of the Internal Revenue Code. Donations may also qualify for tax credits under Pennsylvania tax laws. Erie County Technical School encourages contributions and donations to our educational programs.**

2. PRODUCT DESCRIPTION-

All proposed products must be equal to, or better than:

Electronix Express - RSR Electronics, Inc.- (part number references)

Electronix Express- RSR Electronics, Inc.- products are used for descriptions of the desired equipment. Equipment from other manufacturers/vendors will be considered.

- Oscilloscope – part number 01BK2120
- Function Generator – part number 01FG4011
- Digital Multi-meter – part number 01DM926
- Power Supply – part number 01PS1652

Bid pricing is requested in quantities of: 6, 12, 18, OR 24 of each item.

The quantity purchased is dependent on bid pricing and the total amount of funds available, to be determined at time of the awarding of the bid by the Operating Committee.

Complete descriptions of all items being proposed must accompany the bid.

Warranty information must accompany the bid.

Questions regarding general specifications may be directed to:

Mr. Paul Fritz, Business Manager

814-864-0641, Ext. 344, or email: pfritz@ects.org

Questions regarding equipment details may be directed to:

Electronics Program : Mr. Timothy Mientkiewicz, Instructor, 814-864-0641, ext. 314,

or e-mail: tmientkiewicz@ects.org

3. PRICING BID FORM

Item- part number	Quantity - 6	Quantity - 12	Quantity - 18	Quantity - 24
Oscilloscope – part number 01BK2120	\$	\$	\$	\$
Function Generator – part number 01FG4011	\$	\$	\$	\$
Digital Multi-meter – part number 01DM926	\$	\$	\$	\$
Power Supply – part number 01PS1652	\$	\$	\$	\$
Total bid price	\$	\$	\$	\$

Attach a complete description of any additional costs not included above.

4. SIGNATURE

Having carefully reviewed the Bid Specifications supplied by Erie County Technical School and being completely familiar with all requirements and conditions set forth, the undersigned agrees to supply all materials and services required for the project. The undersigned further acknowledges the right of Erie County Technical School to reject any and all bids and to waive any defect in form. The undersigned further certifies that this bid was prepared independently and without collusion with any known bidders in compliance with the Pennsylvania Anti-Bid-Rigging Act.

Firm Name _____

Address _____

City, State, Zip Code _____

Phone _____

By _____

Title _____

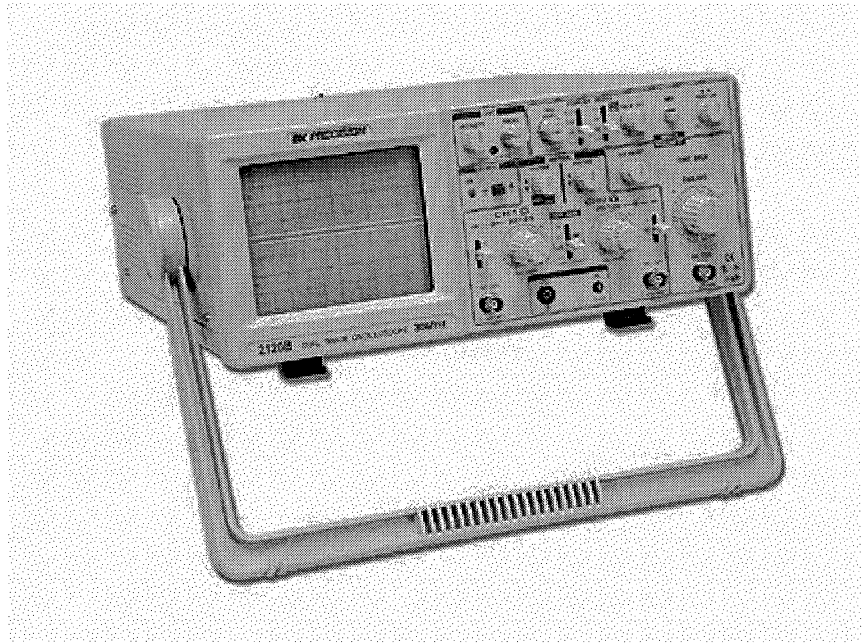
Signature _____ Date _____

Oscilloscope

30MHz

Model 2120B

- Dual or single trace operation
- Auto/Norm triggered sweep operation with AC, TVH, TVV and line coupling
- Calibrated 18 step time base with X10 Magnifier
- With two 10:1 probes
- 1mv/div sensitivity
- Compact low-profile design



Part No.

Add to Cart 01BK2120

Function Generator

5 MHz with Digital Display

Model 4011A

Model 4012A - With Sweep Function



- Sine, square, triangle, pulse and ramp output
- Coarse and fine tuning
- 4 digit LED display
- Variable duty cycle
- Variable DC offset
- Range: 0.2 Hz to 5 MHz in 7 ranges.

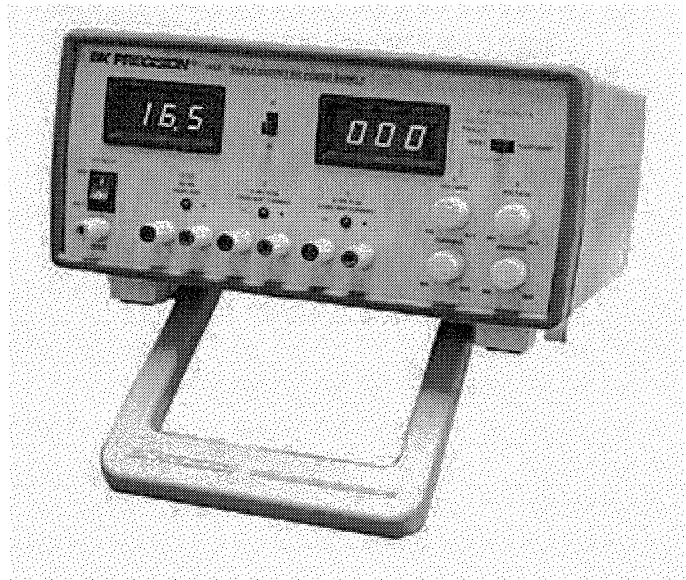
	Part No.	Description
Add to Cart	01FG4011	Model 4011A

Power Supply

Triple Output Digital

Model 1652

- Two 0 to 24V DC variable outputs (0.5A)
- One fixed 5V output @ 4 amps
- Independent or tracking operation
- Designed to operate continuously at rated output
- Short circuit, overload and reverse polarity protection
- Connect outputs in series for higher output voltage or parallel for higher output current (switch selectable)
- Easy to read digital meter that displays voltage or current
- Dimensions: 5.5" x 6.0" x 10.5"; Wt.: 12 lbs.



Part No.

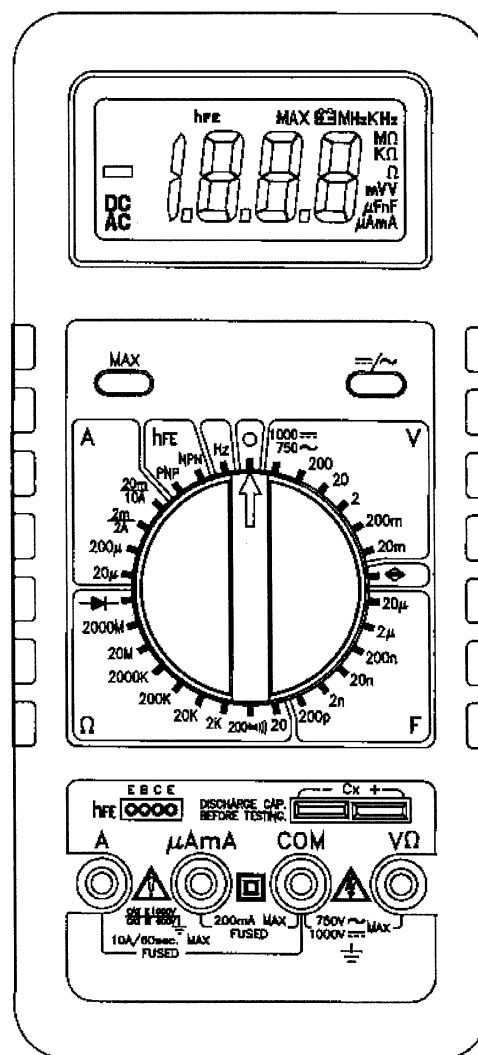
Add to Cart 01PS1652-WB

RSR DIGITAL MULTIMETER WITH FREQ. COUNTER

Part No. 01DM926

Back to [Digital Multimeter Model 926](#) Main Page

- Display:** 3½ digit liquid crystal display (LCD) with a maximum reading of 1999.
- Polarity:** Automatic, positive implied, negative polarity indication.
- Overrange:** (OL) or (–OL) is displayed.
- Zero:** Automatic.
- Low Battery Indication:** The “” is displayed when the battery voltage drops below the operating level.
- Measurement Rate:** 2.5 times per second nominal.
- Operating Environment:** 0°C to 40°C at < 70% relative humidity.
- Storage Temperature:** –20°C to 60°C, 0 to 80% R.H. with battery removed from meter.
- Accuracy:** Stated accuracy at 23°C ±5°C, <75% relative humidity.
- Safety:** According to EN61010-1 protection class II overvoltage category (CAT II 1000V, CAT III 600V) pollution degree 2.
- Power:** Single standard 9-volt battery, NEDA 1604, JIS 006P, IEC 6F22.
- Dimensions:** 200mm (H) x 90mm (W) x 40mm (D)
- Weight:** 14 oz (400g) including battery.
- Accessories:** One pair test leads, one spare fuse installed, 9V battery (installed) and Operating Instructions.
- Fuse Replacement:** # 2000AGX1/2
2000CRM10



RSR DIGITAL MULTIMETER**WITH FREQ. COUNTER***Part No. 01DM926 (con't)***DC VOLTS****Ranges:**

20mV, 200mV, 2V, 20V, 200V, 1000V

Resolution: 10 μ V**Accuracy:** $\pm (1.5\% \text{ rdg} + 5\text{dgt})$ on 20mV range $\pm (0.5\% \text{ rdg} + 1\text{dgt})$ on other ranges**Input Impedance:** 10M Ω **Overload Protection:**

500VDC or AC rms on 200mV range

1000VDC or 750VAC rms on all other ranges.

AC VOLTS (50HZ – 500HZ)**Ranges:** 20mV, 200mV, 2V, 20V, 200V, 750V**Resolution:** 10 μ V**Accuracy:** $\pm (3.0\% \text{ rdg} + 5\text{dgt})$ on 20mV range $\pm (1.0\% \text{ rdg} + 4\text{dgt})$ on 200mV to 200V ranges $\pm (2.0\% \text{ rdg} + 4\text{dgt})$ on 750V range**Input Impedance:** 10M Ω **Overload Protection:**

500VDC or AC rms on 200mV range.

1000VDC or 750VAC rms on all other ranges.

DC CURRENT**Ranges:** 20 μ A, 200 μ A, 2mA, 20mA, 2A, 10A**Accuracy:** $\pm (1.0\% \text{ rdg} + 1\text{dgt})$ on μ A, mA ranges $\pm (3.0\% \text{ rdg} + 1\text{dgt})$ on 2A, 10A range**Input Protection:**

0.5A / 250V fast blow fuse

10A / 600V fast blow ceramic fuse

AC CURRENT (50Hz – 500Hz)**Ranges:** 20 μ A, 200 μ A, 2mA, 20mA, 2A, 10A**Accuracy:** $\pm (2.5\% \text{ rdg} + 4\text{dgt})$ on 200 μ A, 20mA ranges $\pm (2.5\% \text{ rdg} + 40\text{dgt})$ on 20 μ A, 2mA, 2A ranges $\pm (3.5\% \text{ rdg} + 4\text{dgt})$ on 10A range**Input Protection:**

0.5A / 250V fast blow fuse

10A / 600V fast blow ceramic fuse

RESISTANCE**Ranges:** 20 Ω , 200 Ω , 2K Ω , 20K Ω , 200K Ω , 2000K Ω , 20M Ω , 2000M Ω **Accuracy:** $\pm (0.8\% \text{ rdg} + 40\text{dgt})$ on 20 Ω range $\pm (0.8\% \text{ rdg} + 4\text{dgt})$ on 200 Ω range $\pm (0.8\% \text{ rdg} + 2\text{dgt})$ on 2K Ω to 2000K Ω ranges $\pm (3.0\% \text{ rdg} + 4\text{dgt})$ on 20M Ω range $\pm (5.0\% \text{ rdg} - 10\text{dgt}) + 10\text{dgt}$ on 2000M Ω range**Open Circuit Volts:**0.3Vdc (3.0Vdc on 20 Ω , 200 Ω and 2000M Ω ranges)**Overload Protection:** 500VDC or AC rms**CONTINUITY****Audible Indication:** Less than 40 $\Omega \pm 20\Omega$ **Overload Protection:** 500VDC or AC rms**DIODE TEST****Test Current:** 1.0mA $\pm$ 0.6mA**Accuracy:** $\pm (3.0\% \text{ rdg} + 3\text{dgt})$ **Open Circuit Volts:** 3.0Vdc typical**Overload Protection:** 500VDC or AC RMS**CAPACITANCE:****Ranges:** 200pF, 2nF, 20nF, 200nF, 2 μ F, 20 μ F**Resolution:** 0.1pF**Accuracy:** $\pm (3.0\% \text{ rdg} + 10\text{dgt})$ on all ranges**FREQUENCY (AUTORANGING):****Ranges:** 2KHz, 20KHz, 200KHz, 2000KHz, 15MHz**Accuracy:** $\pm (0.1\% \text{ rdg} + 1\text{dgt})$ on all ranges**Sensitivity:** 1.0V rms min.**Overload Protection:** 500VDC or AC rms**LOGIC TEST****Threshold:** Logic Hi (2.8 $\pm$ 0.8V)Logic Lo (0.8 $\pm$ 0.5V)**Frequency Response:** 20MHz**Detectable Pulse Width:** 25nS**Pulse Limits:** > 30% & < 70% duty**Overload Protection:** 500VDC or AC rms**TRANSISTOR h_{FE}:****Ranges:** 0 – 1000**Base Current:** 10 μ Adc approx. (V_{ce} = 3.0Vdc)