

# E-Textiles Catalogue 2013

**Electron Electronics** 

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#### PRICES:

All prices are exclusive of V.A.T. which will be charged at the current rate. We reserve the right to effect changes without prior notice. Prices will be those ruling on the day of despatch.

#### **ORDERING:**

All orders are executed to customers exact instructions. To assist in the prompt despatch of your order please use the order code for the product, and quote your account number. All orders under £30.00 in value will be subject to a handling charge of £4.95 unless previously agreed in writing. Orders are accepted by telephone, fax, e-mail and on-line at www.electronelec.co.uk

#### **DELIVERY:**

Our large stocks offer prompt despatch of many of the products listed in this catalogue. Delivery will be made by first class post, or by an overnight courier offering next day UK delivery.

#### **ORDER CANCELLATION:**

Cancellation of an order can only be accepted after prior negotiation and agreement. On no account can cancellation be accepted for items specially ordered on a customers behalf.

- 1. Cash with order. Please add V.A.T. to the total including any handling charges. Please ensure that all cheques are made payable to ELECTRON ELECTRONICS.
- 2. By credit/debit card with online orders only.
- 3. Credit terms are available to trade customers. Please supply a bankers reference and two trade references. Educational establishments have automatic account facilities. Payment is strictly nett due on the last day of the month following the month of invoice.
- 4. The property in the goods sold does not pass to the buyer until ELECTRON ELECTRONICS has received payment in full for the goods.

# **GUARANTEE:**

All goods supplied by ELECTRON ELECTRONICS are brand new and are fully guaranteed by the manufacturer whose conditions shall prevail. Goods which can be proved to be faulty may be returned for inspection provided our sales desk has been notified first for authorisation. Please enclose with the goods a returns note stating the invoice no., the date of purchase and the nature of the fault. All faulty goods must be returned in their original packaging, and sent securely packed, as no responsibility can be accepted for damage to goods that have been badly packed. All returns must be sent carriage paid. Unless stated all goods are guaranteed for twelve months from date of invoice. All software programs are supplied on the strict understanding that ELECTRON ELECTRONICS does not guarantee the intellectual contents to be free from any errors or omissions. The software manufacturer must be contacted if any problems occur. At all times it is the customers responsibility to register any enclosed guarantee documentation with the manufacturer concerned so as to benefit from service and technical help.

#### **RETURNS:**

No returns except "under guarantee" items accepted.

#### **DOCUMENTATION:**

Single invoices are supplied with the goods. A charge will be made for additional copies.

#### SHORTAGES AND DAMAGES:

All claims for shortages and damages to goods must be notified to ELECTRON ELECTRONICS within ten days from date of invoice. Full details must be given and packaging etc retained. Any parcel delivered damaged to you should be returned.

#### LIABILITY:

ELECTRON ELECTRONICS will not be under any liability resulting from our negligence, in respect of defects in goods supplied or for any damage or loss resulting from such defects: or for lack of information or incorrect information or from loss of revenue or any other loss.

#### **CATALOGUE:**

Products offered in this catalogue may be subject to patents or other protection. Reproduction of this catalogue in part or whole without prior consent is strictly prohibited.

#### **TECHNICAL ADVICE;**

All information supplied is correct to the best of our knowledge. Manufacturers data sheets are available upon request or from our web site www.electronelec.co.uk . All guarantees will not be affected by and no obligation or liability shall result from providing technical advice on any product or service offered by ELECTRON ELECTRONICS.

#### **CONFIRMATION ORDERS:**

We do not require written confirmation of telephone orders. If you do send written confirmation orders, please ensure that the order is clearly marked confirmation, otherwise your order will be duplicated. You will then be responsible for settlement of the duplicated order in full.

This agreement shall be determined in all respects by the laws of England.

### **Export Orders:**

Orders placed by overseas purchasers are subject to the following additional conditions:

- 1. Payment must be made in advance by either credit card, bank draft or telegraphic transfer. All associated charges must be paid by the purchaser.
- 2. Freight and insurance is charged at cost

If placing an order from overseas please indicate method of payment. If you are E.U based please advise full VAT number when placing your order.

E and OE

# DaisyPIC08

DaisyPIC08 is a carrier for an 8pin surface mount PIC with a 3 pin programming connector. Optional limiting resistors can be fitted to the PCB for connection to stand-alone LEDs sewn into the textiles.

#### **Paul Gardiner**



# DaisyPIC Tri LED

Carrier for surface mount Tri colour (red, green and blue) LEDs and their limiting resistors. Different colours can be produced by switching on different combinations of LED.

### **Paul Gardiner**



Order Type Price each code

525-164 £2.95 525-164A £3.95 Туре

Order

code

Price each

DaisyPIC Tri LED kit

DaisyPIC Tri LED assembled

525-172 £1.15

525-172A £1.75

# DaisyPIC20

DaisyPIC08 kit

DaisyPIC08 assembled

DaisyPIC20 is a carrier for a 20pin surface mount PIC with a 3 pin programming connector. 8 output pins are buffered with darlington transistors. There is provision for 4 inputs

#### **Paul Gardiner**



### Daisy Light sensor

Carrier for surface mount light sensor

# Paul Gardiner



Type

DaisyPIC20 kit

Order

Price each

525-186 £3.89 Туре Order Price each

code

Daisy light sensor kit 525-184 £1.49 Daisy light sensor assembled 525-184A £2.09

# Daisy push button

Carrier for surface mount tactile switch (push button).



**Paul Gardiner** 

Order

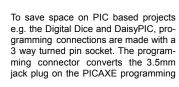
code

Price each

525-174 £0.95

DaisyPIC push button assembled 525-174A £1.45

#### **DaisyPIC Programming connector Paul Gardiner**





Type Order Price each

code

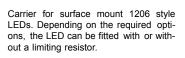
DaisyPIC programming conn kit 525-168 DaisyPIC programming conn assembled 525-168A £1.85

# **DaisyPIC LED**

DaisyPIC push button kit

Type

# **Paul Gardiner**





3V power supply with on/off switch. Uses a single CR2032 coin cell supplied.

Daisy 3V power supply



**Paul Gardiner** 

Туре Order Price each

code

DaisyPIC LED kit 525-170 £0.45 DaisyPIC LED assembled 525-170A £0.95

Туре Order Price each

code

Daisy 3V power supply kit 525-166 £1.15 Daisy 3V power supply assembled 525-166A £1.75

### Daisy 6V power supply

#### **Paul Gardiner**

### 5mm standard LED's

# Kingbright

6V power supply with on/off switch. Uses two CR2032 coin cells.



Туре	Order	Price each
	code	
Daisy 6V power supply kit	525-188	£1.59
Daisy 6V power supply assembled	525-188A	£2.19

#### **Daisy Piezo Paul Gardiner**

Туре	Order	Price each
	code	
Daisy Piezo kit		£POA

#### Conductive thread

**Electrical Characteristics** 

The thread has a resistance of approximately 0.65 ohm / cm, or 20 ohm / foot. This is quite sufficient for, say, powering LEDs over quite large distances. Resistance does not vary significantly from one length of thread to the next as some are reported to do, so you should be able to use this thread without concern for "dead" sections



#### **Physical Characteristics**

The thread has a breaking strain of around 9.3 pounds (4.2 kilos). It comprises roughly 96 individual filaments, each coated with a micronthick layer of natural silver. In construction, 16 of these filaments are wound together to form an initial twist; two of these twists are then twisted together, and finally three of these twists are combined to form

In thread terms, it's around 18 denier. In terms understandable to me, it's a little heavier than a regular sewing thread, but not as heavy as an upholstery thread. It can be sewn on most domestic sewing machines using either a regular needle or the next size up.

This thread does not fray. As far as I can tell, there are no loose ends of filaments except where they have been cut. The filaments are very smooth, so there are no fine tendrils as you will find with a cotton thread. This used to result in a lack of cohesion in the thread, resulting in "bunching" at the needle when machine sewing; this is no longer the case.

Туре	Order	Price each
	code	
Conductive thread	525-290	£22.90









A range of standard LED's for PCB and panel mounting. Kingbright L53 series.

Technical	specification

Туре	If	Vf	Int at Iv	View
	max.	typ.	mcd	angle
Red	20mA	1.7	3.2@10mA	60 deg
Green	25mA	2.2	32@10mA	60 deg
Yellow	30mA	2.1	32@10mA	60 deg
Orange	30mA	2.1	30@10mA	60 dea

•	Туре	Order	Price each
		code	
	Red L-53HD 5mm led	530-005	£0.03
	Red L-53ID 5mm Hi bright led	530-038	£0.03
	Green L-53GD 5mm led	530-006	£0.03
	Yellow L-53YD 5mm led	530-007	£0.03
	Orange L-53ND 5mm led	530-039	£0.035

#### 5mm Clear LED

#### Kingbright

A range of 5mm high efficiency LEDs in a water clear package. All types are colour and intensity matched.



#### Technical specification

Type	lf	Vf	Int		View
	max.	typ.	mcd		angle
Clear Red	30mA	2.0	200@20	)mA	30 deg
Clr Green	25mA	2.2	150@20	)mA	30 deg
Туре			Orde	er Pri	ce each
			code		
L-53SRC-C Clear red			530-	014 £0	.03
L-53SGC	Clear greer	า	530-	044 £0	.03

# 5mm flashing LED's

# Kingbright

#### 5mm Pink 3200mcd LED

#### **Yiow Chie**









A range of 5mm diffused round LED's with an inbuilt IC to produce a continuous flash at a frequency of 3Hz.Supply voltage 9 to 12V.No series resistor required. Kingbright L-56 series.

# Technical specification

Туре	vpe If Vf Int at 9v			View		
	max.	typ.	mo	bd		angle
Red	38-56mA	9-12V	8			60
Green	38-56mA	9-12V	32			60
Yellow	38-56mA	9-12V	32			60
Туре				Order	Pri	ce each
				code		
L-56BHD Red 5mm F-LED				530-009	£0.	14
L-56BGD Green 5mm LED				530-011	£0.	14
L-56RYD Yellow 5mm LED			530-012		£0.14	

#### Technical specification

Туре	If	Vf	Int at Iv		View
	max.	typ.	mcd		angle
Pink	20mA	3.1	3200@20n	nΑ	15 deg
Туре			Order	Pr	ice each
			code		
YCZ-513PKC 5mm pink led			530-04	6 £0	.09

# 5mm Colour changing LED



# 5mm White 8000mcd LED

A white high intensity LED for PCB and panel mounting. LWH-510CWH.



#### Technical specification

Туре	If	Vf	Int at Iv	View
	max.	typ.	mcd	angle
Colour	30mA	4.5	R= 3000 B=2500 G=8400	30 deg

Туре	Order	Price each
	code	
5mm Colour changing/flashing led	530-048	£0.24

# **Technical specification**

Туре	If	Vf	Int at Iv	,	View
	max.	typ.	mcd	;	angle
White	20mA	3.6	8000@20m	A :	20 deg
Туре			Order	Pric	e each
I.W.H510	CWH White	code 530-022	£0 8	52	

### Lithium coin cells

# 5mm Blue 2500mcd LED

A blue high intensity LED for PCB and panel mounting. Kingbright L53 series.



# Kingbright





Туре	Capacity	Dimensions		Volts
CR2032	210mAh	3.2 x 20mm d	lia	3.0
Туре	Capacity	Order code	Price per t	attery
CR2032 GP CR2032 ATC	210mAh	100-148 100-144	£0.32 £0.15	

#### **Technical specification**

	-				
Туре	If	Vf	Int at Iv	View	
	max.	typ.	mcd	angle	
Blue	20mA	3.6	2500@20mA 20 deg		
Type			Order P	der Price each	
			code		
Blue 5mm led			530-023 £0.21		

#### Toaster oven

A toaster oven that can be used for the soldering of surface mount components. Ideal for use in schools. The temperature can be set up to 250 deg C. Dimensions L 27.7 x W 42.5 x H 73.5 cm. Weight 9.2kg, 230 V, 50 Hz, 800 Watts.



# Tweezer set

A set of 4 high quality stainless steel tweezers in a soft plastic wallet. Set consists of 1 pair straight nosed, 1 pair straight nosedreverse action, 1 pair bent nosed and 1 pair flat nosed. All 110mm long.



Type Order Price each

code

170-075 £28 50 Toaster oven

order Price each Type

code

590-037 £3.39 Tweezer set

# Solder paste

Microprint P2004 No clean solder paste for use with surface mount components. Microprint P2004 no clean is tested in accordance with J-STD-004 (Type ROL1). Type L1 (Halide 0.48%). Alloy: Sn62 Sn61.5-62.5, Ag1.8-2.2 Pb Remainder Metal %: 87% Particle Size: 20-38 Melting Point: 179 Degrees C. Packaged: 0.040Kg syringe (40g)



#### Warton Illuminated magnifying lamp

3x magnification lens which is scratch resistant. Integral circular 22W neon tube. Mounted on a strong, flexible 32" reach extension arm with removeable table fixing clamp. On/off rocker switch fitted



Power supply 230V AC

Туре Order Price each

code

Magnifying lamp 590-045 £37.00 590-060 £1.80 Replacement bulb

Туре Order Price each

code

Solder paste 40g lead free 170-180 £13.75

# **Syringe**

Disposable 3cc luer lock manual syringe is fully assembled and has calibrations to help the user gauge how much material is being dispensed



Order Price each Type

code

170-186 £0.20 3ml Syringe

Tapered nozzle

Jensen



Type Order Price each

code

24swg tapered nozzle 1.25N 170-185 £0.21