

Standard Series Buccaneer

Tried and tested, the Standard Buccaneer is one of our most popular waterproof connectors in the industry today. IP68 and IP69K rated, these environmentally sealed power connectors have been designed into a wide range of markets such as Industrial, Automotive and Marine, setting the gold standard for dust and waterproof circular connectors.



- Flex Cable Connectors
- Water and dustproof to IP68 when mated with compatible connector
- 2, 3, 4, 6, 7, 9, 12, 25 Pole with leading Earth contact on 3 Pole Socket versions
- Screw, Crimp, Crimp/Solder Terminations depending on part code and number of Poles
- PX0734 Sealing Cap available separately to maintain IP rating of unmated connectors
- Mate with PX07 Series In-Line Flange and Panel Mount Connectors
- Plug or Socket
- Screw contacts supplied fitted, Crimp contacts supplied loose (Crimp/Solder contacts and fitting tools available separately)
- Choice of cable acceptance 3.5mm-9mm diameter depending on part code (see data for details)
- Cable Support accessory 12237 available separately to provide extra support for smaller cables (5mm-9mm diameter)
- Colour choices and colour codes: Blue (BL), Green (GN), Grey (GY), Light Grey (LG), Red (RD), White (WH), Yellow (YL), Black (standard colour, no suffix code)

Standard Series Buccaneer



<p>Flex Cable Connector</p>  <p style="text-align: right;">PX0731</p>	<ul style="list-style-type: none"> ⬡ Mates with In-Line Flex or Panel Mounting Versions ⬡ Screw Locking Ring ⬡ Leading Earth on 3 Pole Connectors ⬡ Standard Cable Acceptance (2 to 9 pole) 6-8mm, 3.5-9mm with Alternative Glands 	
---	--	---

Pin Contacts	Socket Contacts	Pole Count	Termination	Contacts
PX0736/P	PX0736/S	02	Screw	Supplied Fitted
PX0731/P	PX0731/S	03	Screw	Supplied Fitted
PX0776/P	PX0776/S	03	Crimp	Supplied Loose
PX0748/P	PX0748/S	04	Screw	Supplied Fitted
PX0739/P	PX0739/S	06	Screw	Supplied Fitted
PX0745/P	PX0745/S	07	Screw	Supplied Fitted
PX0728/P	PX0728/S	09	Crimp	Supplied Loose
PX0794/P	PX0794/S	12	Crimp / Solder	Order Separately
PX0820/P	PX0820/S	25	Crimp / Solder	Order Separately

<p>Inline Flex Cable Connector</p>  <p style="text-align: right;">PX0732</p>	<ul style="list-style-type: none"> ⬡ Mates with Flex or Panel Mounting Versions ⬡ Screw Locking Ring ⬡ Leading Earth on 3 Pole Connectors ⬡ Standard Cable Acceptance (2 to 9 Pole) 6-8mm, 3.5-9mm with Alternative Glands 	
--	--	---

Pin Contacts	Socket Contacts	Pole Count	Termination	Contacts
PX0737/P	PX0737/S	02	Screw	Supplied Fitted
PX0732/P	PX0732/S	03	Screw	Supplied Fitted
PX0778/P	PX0778/S	03	Crimp	Supplied Loose
PX0749/P	PX0749/S	04	Screw	Supplied Fitted
PX0740/P	PX0740/S	06	Screw	Supplied Fitted
PX0746/P	PX0746/S	07	Screw	Supplied Fitted
PX0729/P	PX0729/S	09	Crimp	Supplied Loose
PX0795/P	PX0795/S	12	Crimp / Solder	Order Separately
PX0821/P	PX0821/S	25	Crimp / Solder	Order Separately

Standard Series Buccaneer



Pre Wired Flex Cable Connector



PX0700

- ⬡ Overmoulded Cable Assemblies
- ⬡ Up to 14mm Dia Cable with PVC or PU Jackets
- ⬡ PX0700 Flex Cable Connector
- ⬡ Mates with In-Line Flex Connector & all Panel Connectors



Front Panel Mounting Connector



PX0730/P

- ⬡ Mates with Flex Cable Connector
- ⬡ Front Panel Mounting
- ⬡ Single Hole Fixing
- ⬡ Pin or Socket Versions
- ⬡ Poles 2, 3, 4, 6, 7, 9, 12 & 25



Pin Contacts	Socket Contacts	Pole Count	Termination	Contacts
PX0735/P	PX0735/S	02	Screw	Supplied Fitted
PX0730/P	PX0730/S	03	Screw	Supplied Fitted
PX0779/P	PX0779/S	03	Crimp	Supplied Loose
PX0747/P	PX0747/S	04	Screw	Supplied Fitted
PX0738/P	PX0738/S	06	Screw	Supplied Fitted
PX0744/P	PX0744/S	07	Screw	Supplied Fitted
PX0727/P	PX0727/S	09	Crimp	Supplied Loose
PX0796/P	PX0796/S	12	Crimp / Solder	Order Separately
PX0822/P	PX0822/S	25	Crimp / Solder	Order Separately

Rear Panel Mounting Connector



PX0709/x/xx

- ⬡ Mates with Flex Cable Connector
- ⬡ Front Panel Mounting
- ⬡ Single Hole Fixing
- ⬡ Pin or Socket Versions
- ⬡ Poles 2, 3, 4, 6, 7, 9, 12 & 25



Pin Contacts	Socket Contacts	Pole Count	Termination	Contacts
PX0709/P/02	PX0709/S/02	02	Screw	Supplied Fitted
PX0709/P/03	PX0709/S/03	03	Screw	Supplied Fitted
PX0708/P/03	PX0708/S/03	03	Crimp	Supplied Loose
PX0709/P/04	PX0709/S/04	04	Screw	Supplied Fitted
PX0709/P/06	PX0709/S/06	06	Screw	Supplied Fitted
PX0709/P/07	PX0709/S/07	07	Screw	Supplied Fitted
PX0708/P/09	PX0708/S/09	09	Crimp	Supplied Loose
PX0708/P/12	PX0708/S/12	12	Crimp / Solder	Order Separately
PX0708/P/25	PX0708/S/25	25	Crimp / Solder	Order Separately

Standard Series Buccaneer



<p>PCB Mounting Connector</p>  <p style="text-align: right; color: blue;">PX0707/P/12</p>	<ul style="list-style-type: none"> ⬡ Mates with Flex Cable Connector ⬡ Rear Panel Mounting ⬡ No. Poles: 3, 4, 6, 9, 12 or 25 ⬡ Pin or Socket Versions ⬡ Pre-loaded Gold Plated Contacts 	
---	--	---

Pin Contacts	Socket Contacts	Pole Count	Termination	Contacts
PX0707/P/03	PX0707/S/03	03	PCB	Supplied Fitted
PX0707/P/04	PX0707/S/04	04	PCB	Supplied Fitted
PX0707/P/06	PX0707/S/06	06	PCB	Supplied Fitted
PX0707/P/09	PX0707/S/09	09	PCB	Supplied Fitted
PX0707/P/12	PX0707/S/12	12	PCB	Supplied Fitted
PX0707/P/25	PX0707/S/25	25	PCB	Supplied Fitted

<p>Bulkhead Flange Mounting Connector</p>  <p style="text-align: right; color: blue;">PX0756/S</p>	<ul style="list-style-type: none"> ⬡ Mates with Flex Cable Connector ⬡ Rear Panel Mounting ⬡ No. Poles: 3, 4, 6, 9, 12 or 25 ⬡ Pin or Socket Versions ⬡ Pre-loaded Gold Plated Contacts 	
--	--	--

Pin Contacts	Socket Contacts	Pole Count	Termination	Contacts
PX0757/P	PX0757/S	02	Screw	Supplied Fitted
PX0756/P	PX0756/S	03	Screw	Supplied Fitted
PX0787/P	PX0787/S	03	Crimp	Supplied Loose
PX0761/P	PX0761/S	04	Screw	Supplied Fitted
PX0758/P	PX0758/S	06	Screw	Supplied Fitted
PX0760/P	PX0760/S	07	Screw	Supplied Fitted
PX0762/P	PX0762/S	09	Crimp	Supplied Loose
PX0798/P	PX0798/S	12	Crimp/Solder	Order Separately
PX0823/P	PX0823/S	25	Crimp/Solder	Order Separately

Standard Series Buccaneer



Low Profile Flange Mounting Connector



PX0765/S

- ⬡ Screw Flange Fixing
- ⬡ Pin or Socket Versions
- ⬡ Poles 2, 3, 4, 6, 7, 9, 12 & 25
- ⬡ Mates with Flex Cable Connector
- ⬡ Supplied with Sealing Gasket & Screw Sealing Grommets



Pin Contacts	Socket Contacts	Pole Count	Termination	Contacts
PX0764/P	PX0764/S	02	Screw	Supplied Fitted
PX0765/P	PX0765/S	03	Screw	Supplied Fitted
PX0781/P	PX0781/S	03	Crimp	Supplied Loose
PX0766/P	PX0766/S	04	Screw	Supplied Fitted
PX0767/P	PX0767/S	06	Screw	Supplied Fitted
PX0768/P	PX0768/S	07	Screw	Supplied Fitted
PX0769/P	PX0769/S	09	Crimp	Supplied Loose
PX0797/P	PX0797/S	12	Crimp/Solder	Order Separately
PX0824/P	PX0824/S	25	Crimp/Solder	Order Separately

Standard Series Buccaneer

<p>Sealing Cap and Assembling Tool</p>  <p>PX0734 PX0733</p>	<ul style="list-style-type: none"> ○ Maintains IP68 Rating of Unmated Panel, Bulkhead & Flange Mount Connectors ○ PX0734 for Flex Cable Connector ○ PX0733 for In-line Flex Front ○ PX0711 for PCB & Rear Panel Mount Connectors 	
<p>Rear of Panel Back Shell</p>  <p>PX0799</p>	<ul style="list-style-type: none"> ○ Environmental Seal for Panel Rear ○ Standard Cable Acceptance 6-8mm, 3.5 to 9mm with Alternative Glands ○ For Front Panel Mounting Connectors ○ Replaces Mounting Nut in Panel Connector 	
<p>PVC Insulation Boot</p>  <p>PNo. 12855</p>	<ul style="list-style-type: none"> ○ Shock Protection for Rear of Connector ○ Flammability Rating UL94V-0 ○ Fits Front Panel Mount Versions Only 	<p>12855 for panel mounting types only.</p> 
<p>Cable Support Accessory</p>  <p>PNo. 12237</p>	<ul style="list-style-type: none"> ○ Gives Extra Support to the Cable ○ Suitable for 5-7mm and 7-9mm Cable Diameters 	<p>12237 provides additional cable support. Suitable for 5-7mm and 7-9mm cables.</p> 

Standard Series Buccaneer

<p>Spring Loaded Sealing Cap</p>  <p>PX0713</p>	<ul style="list-style-type: none"> ⊕ IP54 rated ⊕ Spring loaded ⊕ Clip shut to seal ⊕ For use with front of panel mounting connector types 	
---	--	---

<p>Coloured Contact Inserts</p>  <p>PX0941</p>	<ul style="list-style-type: none"> ⊕ With or Without Matching Gland Nut ⊕ Positive Visual Identification ⊕ Available In: Black, Blue, Green, Grey, Light Grey, Red, White & Yellow
--	---

Part No.	Suffix Colour	Insert / Gland Nut Combinations
Blank	Black	1 = Insert and Gland Nut Coloured
BL	Blue	2 = Insert Only Coloured
GN	Green	
GY	Grey	Example:
LG	Light Grey	PX0731/P/YL1 = Yellow Insert and Gland Nut
RD	Red	
WH	White	
YL	Yellow	

Standard Series Buccaneer

Contacts for 12 & 25 Pole Inserts



12 & 25 Way Contacts

- Crimp or Solder Pins & Sockets
- Gold Plated
- Current Ratings:
12 Way: 5A, 50V
25 Way: 1A, 50V

Part No.		Description
Crimp:	Solder:	Contacts (25 Pole) / Supplied In Packs of 10:
SA3180	SA3180/1	Pins
SA3179	SA 3179/1	Sockets
		Contacts (12 Pole) / (Supplied In Packs of 10:
SA3348	SA3348/1	Pins
SA3347	SA3347/1	Sockets

Assembly Tools



14025
13027

- Crimp Tools for 3, 9, 12 & 25 Pole Crimp Contacts
- Insertion / Extraction Tool for 25 Pole Contacts



Part No.	Description
14232	Crimp Tool (3 pole)
13826	Crimp Tool (9 pole)
14025	Crimp Tool (12 pole)
14025/1AMP	Crimp Tool (25 pole)
14232/1	Positioner (3 pole)
14025/5AMP	Positioner (12 pole)
13027/3	Insertion / Extraction Tool (3 Pole)
13027/1	Insertion / Extraction Tool (12 Pole)
13027	Insertion / Extraction Tool (25 Pole)

Standard Series Buccaneer

Cable Glands



SA3253

- ⬡ Pack of Alternative Cable Glands to Suit Cables from 3.5 to 9mm Dia.

Cable Acceptance - Alternatives

Gland Diameter:	Gland Part:	Gland Colour:	Additional Suffix:
6-8mm	12023	Black	Standard for 2-12 Pole
3.5-5mm	SA3426	Grey	Suffix /04†
5-7mm	12023/1	White	Suffix /05
7-9mm	12023/2	Yellow	Suffix /07*
Gland Pack	SA3253	Pack of 3 Glands to Suit Cables 3.5-5mm, 5-7mm & 7-9mm dia†	

Note:

7-9mm Gland Standard for 25 Way, No Suffix Required.

† Includes Additional Black Gland Cage for 3.5-5mm Dia. Cable Range.

To Order Connector with Alternative Cable Gland add Suffix to Part No. e.g. PX0731/P/07 = PX0731 3 Pin Connector with Cable Gland to Suit 7-9mm Dia. Cable.

Cable Acceptance - Standard As Supplied

No. Contacts:	Cable Diameter or Type:
2-12 Pole	6-8mm
25 Pole	7-9mm

Standard Series Buccaneer



Technical Overview Data

Electrical:

No. Poles:	2, 3	4	6, 7	9	12	25
Current Rating:						
VDE:	12A	10A	5A	5A	5A	1A
UL, CSA:	10A	6A	3A	5A	5A	1A
Voltage Rating (ac/dc):	277V	277V	277V	150V	50V	50V
Contact Resistance:	<10mΩ (2-9 Pole)					
	<5mΩ (12 Pole)					
	<5mΩ (25 Pole)					

Insulation Resistance:	>10 ⁴ MΩ @ 500V d.c. (2-9 Pole)
AC Breakdown voltage:	4kV Pole - Pole (2-9 Pole)
	6kV Poles - Panel (Low Profile Flange and Panel Types – 2-9 Pole)
	7.5kV Poles - Panel (Other Types – 2-9 Pole)

Operating Temp. Range:	-20°C to +70°C
-------------------------------	----------------

Approvals

UL	E93288 and E337507
CSA	LR80968-30
VDE	40023148

Overmoulded Cable Assemblies Approvals to Customer Requirements.

Materials:

Body Mouldings:	Glass Filled Polyamide UL94HB
Inserts (2-25 pole):	Polyamide UL94V-0
PX0707:	Polyamide UL94V-0
PX0708:	Polyamide UL94V-0
PX0709:	Polyamide UL94V-0

Overmoulded Types

Body Mouldings:	Polyurethane
Flammability Rating:	UL94V-HB

Contacts

Screw Terminal:	Brass, Nickel Plated
Crimp (9 pole):	Copper Alloy, Tin Plated
Crimp / Solder (12+25 Pole):	Copper Alloy, Gold Plated (0.1µm on Nickel)

BNC Inserts:	Brass, Nickel Plated
BNC Contacts:	Brass, Silver Plated

RoHS	Compliant
-------------	-----------

Mechanical:

Sealing:	IP69K, Tested in Accordance with DIN 40050/Part 9 IP6k9k
-----------------	--

IP68, EN 60529:1992+A2:2013 Tested @ 1.054kg/sq.cm. (15lb/sq.in.) 10m Depth for 2 Weeks.

EN 60529:1992 +A2:2013 Tested @ 9.84kg/sq.cm. (140lb/sq.in.) 100m Septh for 12 Hours.

Salt Mist:	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1
-------------------	---

Cable Acceptance

2-12 Pole - Standard Gland:	6-8mm Dia
2-12 Pole - Alternative Glands:	3.5-9mm Dia
25 Pole - Standard Gland:	7-9mm Dim
25 Pole - Alternative Glands:	3.5-7mm Dim

Contact Accommodation

2 & 3 Pole Screw Terminals:	4mm ² (12AWG) Max
3 Pole Crimp:	1.0-1.5mm ² (14-18AWG) Max
4, 6 & 7 Pole:	1.5mm ² (16AWG) Max
9 Pole:	0.12-0.21mm ² (24-26AWG)
12 Pole:	0.32mm ² (22-26AWG) Max
25 Pole:	0.12-0.21mm ² (24-26AWG)

Terminations

2-7 Pole:	Screw Terminals
3 Pole:	Screw Terminals & Crimp
9 Pole:	Crimp Contacts
12 Pole:	Crimp & Solder Contacts
25 Pole:	Crimp & Solder Contacts

Tightening Torques:	Gland Nut: 1.13Nm (10lbf.in.)
Flex Mounting / In-Line:	Rear Fixing Nut: 1.7Nm (15lbf.in.)
Panel Mounting:	Front Fixing Nut: 1.4Nm (12.4lbf.in.)

Surface / Bulkhead and Low Profile Flange Mounting:

4 Fixing Screws (using Washers Supplied) 0.34Nm (3lbf.in.)
1.13Nm (10lbf.in.)

Sealings Caps / Locking Ring:

Rear Thread, Front Panel Connector:	M27 x 1.0-6H
--	--------------

Thread, Front Panel Connector:	M35 x 1.0-6H
---------------------------------------	--------------

Standard Series Buccaneer

PX0xxx	X	XX	XX	X
Body Styles	Contacts Type	Cable Acceptance or PCB / Rear Panel Mounting	Insert / Gland Nut Colour	Insert / Gland Nut Colour Combination
	P = Pin S = Socket	Flex Cable and In-line Flex Connectors cable acceptance use: Blank = 6-8mm (Black) standard for 2-12 pole 04 = 3.5-5mm (Grey) 05 = 5-7mm (White) 07 = 7-9mm (Yellow) (standard for 25 way, no suffix required) PCB (PX0707) and Rear Panel Mount connectors (PX0708 and PX0709) use: 02 = 2 pole 03 = 3 pole 04 = 4 pole 06 = 6 pole 07 = 7 pole 09 = 9 pole 12 = 12 pole 25 = 25 pole Front Panel, Bulkhead and Flange Mount - not required:	Blank = Black BL = Blue GN = Green GY = Grey LG = Light Grey RD = Red WH = White YL = Yellow	1 = Insert and Gland Nut Coloured 2 = Insert only Coloured

Example:

PX0707/P/06 = PCB Panel connector, pin contacts, 6 pole
 PX0731/S = Flex Cable connector, socket contacts, 3 pole
 PX0732/P/07/BL2 = In-Line Flex Cable connector, pin contacts, 3 pole, 7-9mm cable acceptance, blue insert

PCB Layouts:

Sockets:

Contact Nos viewed from rear of panel

Pins:

Contact Nos viewed from rear panel rear of panel



PX0707/S/03

PX0707/S/04



PX0707/P/03

PX0707/P/04



PX0707/S/06



PX0707/S/09



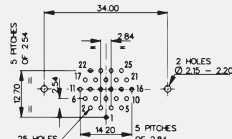
PX0707/P/06



PX0707/P/09



PX0707/S/12



PX0707/S/25



PX0707/P/12






PX0707/P/25

Sealed Inline Cable Joiner

<p>Cable Joiner</p>  <p>PX0777</p>	<ul style="list-style-type: none"> ⬡ Standard Cable Acceptance 6-8mm ⬡ Cable Range 3.5-9mm (Using Alternative Glands) ⬡ Supplied with 4, 6 or 8 Way ⬡ Terminal Block ⬡ Available Moulded in Black or Orange 	
--	--	---

Technical Overview Data

Specifications:	PX0777	PX0777/4POLE, 6POLE, 8POLE	POLE Configurations:
Rating:	16A, 250V a.c.	10A, 250V a.c.	  
Wire Termination:	3 Way Terminal Block	4, 6, 8 Way Terminal Block	
Conductor Accommodation:	2.5mm ² Max (14AWG)	1.5mm ² Max (16AWG)	
Cable Acceptance:	6-8mm Dia Alternative Glands available on request	6-8mm Dia Alternative Glands available on request	
Material:	Glass Filled Polyamide UL94-HB	Glass Filled Polyamide UL94-V0	
Sealing:	IP68 to BSEN 60529 : 1992 1.054kg/sq.cm. (15lbs/sq.in.) 10m Depth for 2 Weeks	IP68 to BSEN 60529 : 1992 1.054kg/sq.cm. (15lbs/sq.in.) 10m Depth for 2 Weeks	
Salt Mist:	IP69k to DIN 40050-9 EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1	IP69k to DIN 40050-9 EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1	
Operating Temp. Range:	-20°C to +70°C	-20°C to +70°C	
Colour:	Black Orange (Add /OR to PNo.)	Black Orange (Add /OR to PNo.)	
RoHS	Compliant	Compliant	

PX0777	XPOLE	XX	XX
Part No.	Blank = 3 Pole 4POLE = 4 Pole 6POLE = 6 Pole 8POLE = 8 Pole	Blank = 6-8mm 04 = 3.5-5mm 05 = 5-7mm 07 = 7-9mm	Blank = Black OR = Orange
Example:			
	PX0777 = 3 Pole 6-8mm Black PX0777/04 = 3 Pole 3.5-5.0mm Black PX0777/04/OR = 3 Pole 3.5-5.0mm Orange		
	PX0777/4POLE = 4 Pole 6-8mm Black PX0777/6POLE/04 = 6 Pole 3.5-5.0mm Black PX0777/8POLE/04/OR = 8 Pole 3.5-5.0mm Orange		

PX0777 Wiring & Assembly Instructions



1. Strip wires to dimensions shown.
2. Assemble components parts onto cable as shown, then connect wires to terminal block.

ENSURING WIRES CONNECTED INTO ONE SIDE OF TERMINAL BLOCK MATCH WIRES CONNECTED INTO THE OTHER SIDE.

E.g. **Brown to Brown (Live)**
Blue to Blue (Neutral)
Green / Yellow to Green / Yellow (Earth)



Wire Stripping Details

3. Bring the two body mouldings together ensuring the 'O' ring is correctly located in groove then lock together with locking ring, ensure ring is fully tightened.

Put gland cage over gland and push fully home into its appropriate body then fully tighten gland nuts.

4. To ensure a good seal, all surfaces must be completely free of dust, grease or any other contamination.

THIS CABLE CONNECTOR IS SUITABLE FOR USE WITH LOADS NOT EXCEEDING 16 AMPS USING 1.5mm² CABLE

ALWAYS USE WITH SUPPLY PROTECTED BY AN RCD, IF IN DOUBT CONSULT A QUALIFIED ELECTRICIAN.

DANGER

DISCONNECT MAINS
 SUPPLY BEFORE
 DISMANTLING
 CONNECTOR

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: org@lifeelectronics.ru