ip.buffer N4X Manual

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Scannex Electronics Ltd, UK
t: +44(0)1273 715460
f: +44(0)1273 715469

http://www.scannex.co.uk
info@scannex.co.uk

Scannex LLC, USA
t: 1-866-4BUFFER
(1-866-428-3337)

http://www.scannex.com
info@scannex.com

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1. Introduction

The N4X version of the ip.buffer is a product built with the core ip.buffer, a power control board, and housed in an IP67 / N4X enclosure.

For ip.buffer operation and details, please refer to the ip.buffer manuals.

Specific part numbers include:

- ip.4-256.3g.p.N4X
- ip.4-256.4g.p.N4X

> Since the N4X variant is built to order, there can be customer-specific differences compared to this manual.

2. Connectors

2.1. COM1

Panel Connector: Souriau UTS710E7S

Mating Connector: Souriau UTS6JC10E7P

Pin	Function	Notes
A	PWR	Vin switched by RTS1 @ 0.7A[1] (monitor with CTS1)
B	0V	
C	RS232 TX	Device ← ip.buffer
D	RS232 RX	Device → ip.buffer
E	RS232 0V	
F	N/C	
G	WAKEUP	3V3 at 1k max source impedance

2.2. COM2, COM3, COM4

Panel Connector: Souriau UTS710E7S

Mating Connector: Souriau UTS6JC10E7P

Pin	Function	Notes
A	PWR	Vin switched by RTS# @ 0.7A (monitor with CTS#)
B	0V	
C	RS232 TX	Device ← ip.buffer
D	RS232 RX	Device → ip.buffer
E	RS232 0V	
F	N/C	
G	N/C	

[1] Combined current on all four channels cannot exceed 2.5A

2.3. POWER

Panel Connector: UTS710E7P

Mating Connector: UTS6JC10E7S

Pin	Function	Notes
A	Vin	11-28VDC, fused 3A
B	0V	Case is tied to 0V
C	N/C	
D	N/C	
E	N/C	
F	N/C	
G	N/C	

2.4. Ethernet

Panel Connector: M12 D-Code

Mating Cable: Metz Connect 142M4D15020 (Farnell 2442817)

M12 D-Code	RJ45	Notes
1	1	
2	2	
3	3	
4	6	

2.5. Antenna

Panel Connector: TNC

3. Power Board

3.1. Switch Options

	ON	OFF
1 : ON1	Force COM1 PWR on	COM1 PWR controlled by ip.buffer
2 : OPNX	Force ip.buffer power on	ip.buffer started by COM1 WAKEUP

3.2. Screw Terminal Connections

CON	LABEL	Function
CON1	ONP	Internal power enable for ip.buffer (COM1 DTR line[1])
CON1	ONPX	External power enable for ip.buffer (COM1 WAKEUP)
CON1	MNPX	Power sense[2] for ip.buffer (COM1 DSR line)
CON2 to CON5	FLT#	Fault sense for COM channel (COM CTS line)
CON2 to CON5	ON#	Power enable for COM channel (COM RTS line)
CON2 to CON5	GND	
CON2 to CON5	OUT#	Output power for COM channel
CON6	VIN	Input supply 11-28V
CON6	GND	Input 0V
CON6	OUTP	Output power for ip.buffer, nominally 8.4V
CON6	GND	Output 0V for ip.buffer
CON8	0V	
CON8	VOUT	Power output for optional SDI-12 board (nominally 8.4V)

[1] The ip.buffer asserts this line to keep its power running.

[2] Allows the ip.buffer to know if something external (ie through ONPX / COM1 WAKEUP) is requesting the ip.buffer to stay running.

4. Safety Warnings

- See ip.buffer manual for general safety warnings

4.1. Internal AA Battery Caution

The non-N4X ip.buffer includes optional AA NiMH battery support. However, this is not recommended for the N4X enclosure, and the AA battery holder is normally removed.

- NOTE: Do not fit internal AA batteries for N4X enclosure
- WARNING: Never use non-rechargeable batteries.

5. Approvals

- See the ip.buffer manual for EMC, safety, environmental, and cellular approvals.

6. European Union Waste Electrical and Electronic Equipment (WEEE) Statement.

6.1. UK Users

In the UK Scannex is registered as a WEEE producer and has responsibility for the recycling of Scannex products and any products returned to Scannex, postage paid, will be recycled at Scannex's cost.

6.2. European Users (outside the UK)

Where the supplier of Scannex products is resident in your country then the supplier acts as the importer of the equipment. Thus the supplier has the legal responsibility to deal with recycling:

If the supplier of Scannex products is not resident in your country then the business end-user acts as the importer of the product. It is Scannex understanding that in this situation:

- No organisation is required to register as the WEEE producer
- No organisation is required to provide WEEE collection and recycling arrangements.

6.3. Manufacturer/Responsible Party

Scannex Electronics Ltd

Unit 8 English Business Park
English Close
Hove, East Sussex
BN3 7ET
UK

Tel: +44 (0)1273 715460

http://www.scannex.co.uk

Scannex LLC

7400 Beaufont Springs Drive
Suite 300
Richmond, VA 23225
USA

Tel: +1-866-428-3337

http://www.scannex.com