# Programmes After Market Services NPE-3 Series Transceivers

## **Service Tools**

### Service Tools

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### Battery Adapter BDC-3

The Battery Adapter BDC-3 is used along with an external battery capacity meter to check battery capacity.

Note that Li-ion batteries have an internal protection circuit to prevent deep discharge.

### **Product Code**

Battery Adapter BDC-3: 0770083

### View of BDC-3



# Service Battery BBD-3

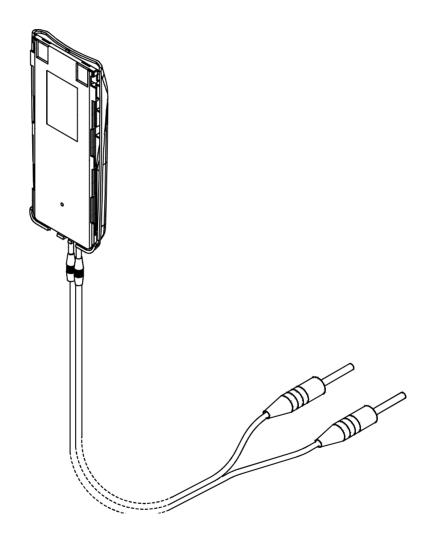
The Service Battery BBD-3 is used in place of the phone's normal battery during service, to supply a controlled operating voltage to the phone for current and charger calibration, and is also required when flashing the phone.

Note that the cable SCB-3 (0730114) is also required for charger calibration.

### **Product Code**

Service Battery BBD-3: 0775071

### View of BBD-3



### Module Test Jig JBT-13

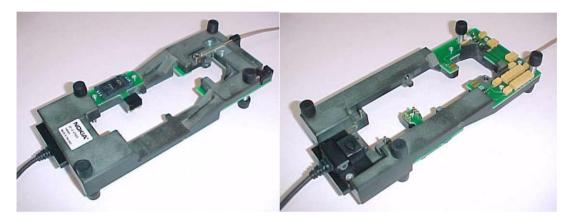
### **Product Code**

Module test jig JBT-13

0770231

The module test jig JBT-13 is used for component level repair of the system module for NPE-3. The jig can be used both with and without the lightguide and keymat mounted. The jig provides the module with supply voltage, RF connection and connection to PC or audio test equipment.

### View of the JBT-13



### **Procedure**

- 1 First, the jig must be equipped with external cables.
- 2 Mount the antenna cable XRC-1B. This must be mounted under the steel bracket held by two screws. See pictures above.
- 3 Connect the DC cable PCS-1 to the DC connector. Note the DC voltage!
- 4 Mount the service cable SCH-5 or the DAU-9P cable to the slide. See pictures above.

### User Instructions.

Insert a SIM card in the SIM card holder.

Apply DC voltage 3.6V to the DC connector. Ensure correct polarity!

Insert the NPE-3 system board in the following way:

First insert the top of the PCB into the jig, ensuring that the RF connector is in the right place.

Then, carefully press the PCB down into the jig, by pressing with two thumbs on each side of the PCB just above the spring supported balls. Hold against the PCB with the other fingers on the back of the PCB, to prevent it from bending. Take care that the two guiding pins in the bottom of the jig fits into the two screw holes in the PCB!

When the PCB is in place, slide in the bottom connector.

Now, the phone powers up.

Check that the SIM card information is read by the phone. If connection is not established, the display will show "Insert SIM card".

### Important note!

Nominal supply voltage is 3.6VDC.

Maximum voltage is 5.0VDC.

If over voltage or reverse voltage is applied, the 2Amp fuse on the supply PCB will blow! Use only the correct 2Amp fuse for replacement! 5 extra fuses are supplied with the jig.

Order code for fuse: 511A004

If necessary, the spring supported balls that locks the PCB, can be adjusted with a small screwdriver for best performance.

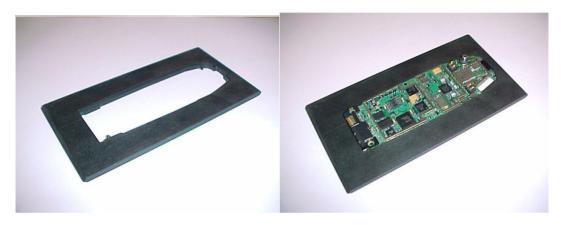
### MicroBGA Solder Jig JBT-13U.

The MicroBGA solder jig JBT-13U is used for replacing the uBGA components on the system module for NPE-3.

### Product code.

uBGA solder jig JBT-13U: 0770242

### View of the JBT-13U



### User instructions.

Insert the NPE-3 system board into the jig. Two guiding pins hold the PCB in position.

Now the jig can be inserted into the micro BGA solder station.

The jig can also be used for fixing the PCB when soldering other components.

Service Tools

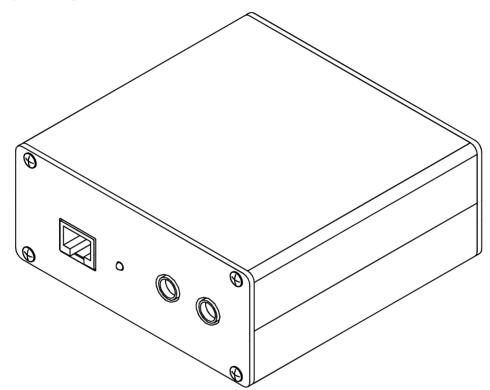
### Flash Loading Adapter FLA-5 (Sales Pack)

The Flash Loading Adapter FLA-5 is used with the Service Battery BBD-3 and Service Cable SCH-5. Power is supplied to FLA-5 from the Flash Security Box TDF-4 via the DC cable PCC-1B, (The PCC-1B cable can be replaced with a Travel Charger ACH-6), and is connected to the Flash Prommer FPS-4S with the cable AXS-5.

### **Product Code**

Flash Loading Adapter FLA-5: 0080178

### View of FLA-5



The sales pack includes:

Sales Package	Type Designation of parts	NMP Code
FLA-5		0080178
	Flash Loading Adapter FLA-5	0770085
	Service Cable SCH-5	0730098
	Printer Cable AXS-5	0730091
	SW diskette	8400041

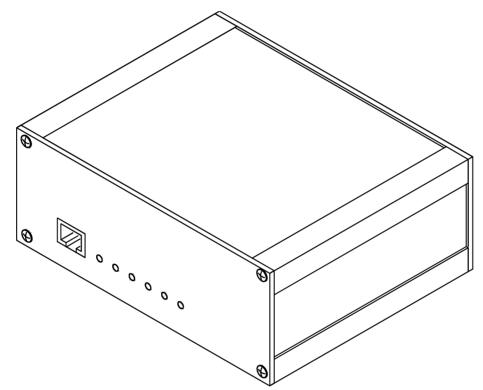
### Flash Prommer FPS-4S (Sales Pack)

The Flash Prommer FPS-4S is used to update the main software of the phone. Updating is done by first loading the new MCU software from the PC to the flash prommer, and then loading the new SW from the prommer to the phone. When updating more than one phone in succession, the MCU software only needs to be loaded to the prommer once.

### **Product Code**

Flash Prommer FPS-4S: 0085095

### View of FPS-4S



The sales pack includes:

Sales Package	Type Designation of parts	NMP Code
FPS-4S		0085095
	Flash Prommer FPS-4	0750090
	Charger ACL-3E	0680015
	Printer Cable	0730029
	D9 - D9 Cable AXS-4	0730090
	SW diskette	8400041

### **Security Box TDF-4**

The Security Box TDF-4 is required for updating MCU software, and infra red testing.

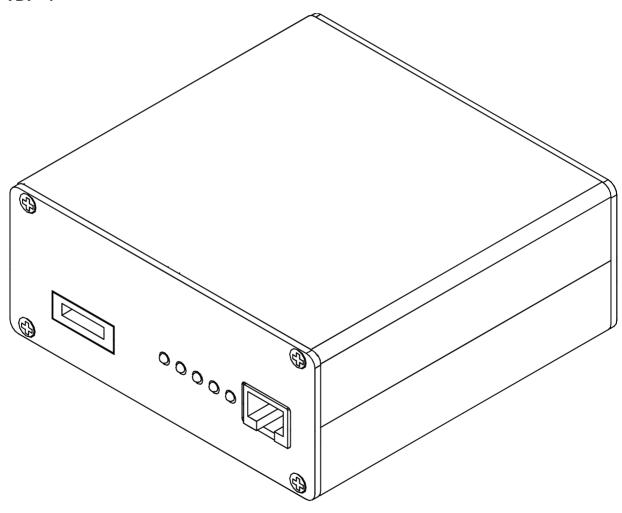
Note1: TDF-4 is delivered in de-activated mode. Fill in the enclosed Activation Request Form, and fax to NMP Salo to get the activation code

Note2: The infra red module JLP-1 is not included in the TDF-4 sales package

### **Product Code**

Security Box TDF-4: 0770106

### View of TDF-4



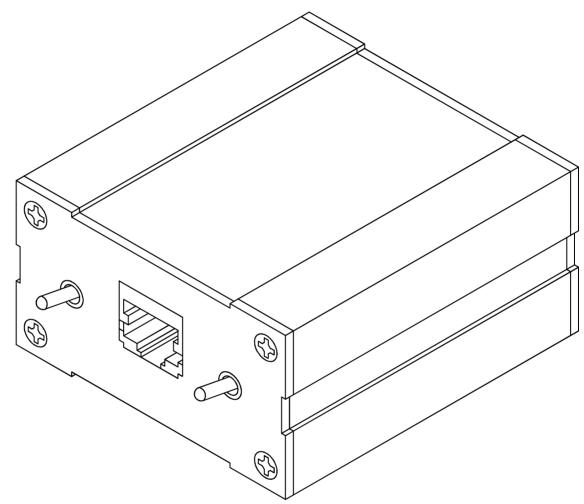
### Service Audio Box JBA-4

The Service Audio Box JBA-4 is used between the Service Cable SCH-5, MBUS Cable DAU-9S, and Audio Cable ADS-1.

### **Product Code**

Service Audio Box JBA-4: 0770094

### View of JBA-4



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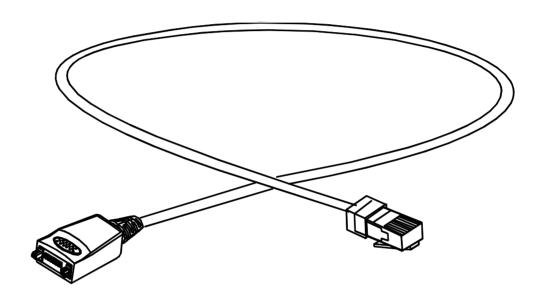
### Service Cable SCH-5

The Service Cable SCH-5 is used between the phone and Service Audio Box JBA-4 (or modular T-adapter. It is also used between the phone and the Flash Loading Adapter FLA-5.

### **Product Code**

Service Cable SCH-5: 0730098

### View of SCH-5



### Service Tools

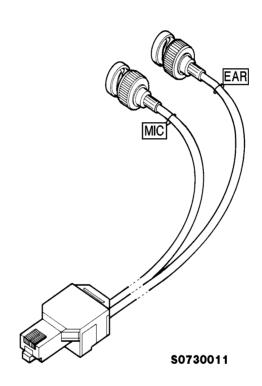
### Audio Cable ADS-1

Audio cable is an adapter routing AF signals (MIC/EAR) from 8 pin modular connector to two BNC connectors. It is used to connect JBA-4, SCH-5, and DAU-9S.

### **Product code**

Audio Cable ADS-1: 0730011

View of ADS-1



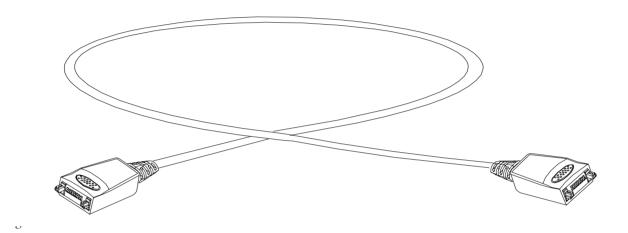
### Warranty Cable SCH-6

The Warranty cable SCH-6 is used to connect two phones., It enables the transfer of data (stored numbers etc.) from one phone to another.

### **Product Code**

Warranty Cable SCH-6: 0730099

### View of SCH-6



### Modular Cable XCM-1

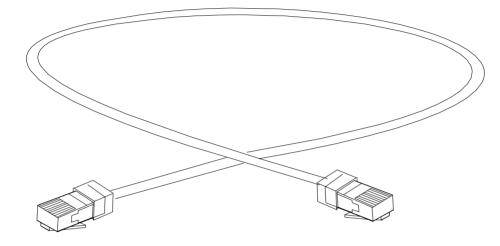
The modular Cable XCM-1 is a standard 1m long 8-core flat cable with male modular-8 connectors in both ends.

### **Product Code**

Modular Cable XMS-1

4626131

### View of XCM-1



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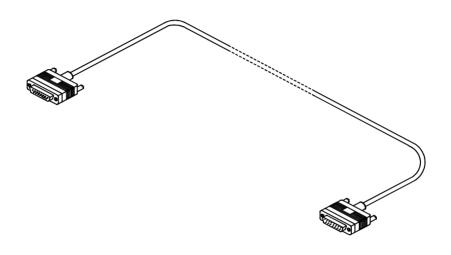
### D15-D15 Cable AXS-5

The D15-D15 Cable AXS-5 is used to connect two 15 pin D connectors. e.g. between FLA-5 and FPS-4S.

### **Product Code**

D15-D15 Cable AXS-5: 0730091

### View of AXS-5



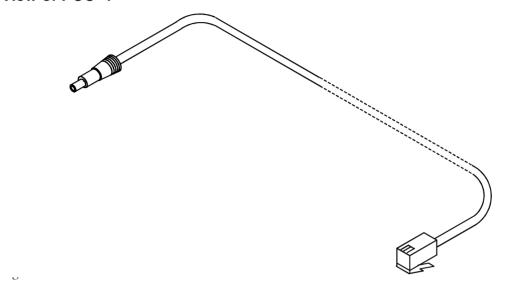
### DC Cable PCC-1B

The DC Cable PCC-1B is used e.g. to connect FLA-5 and TDF-4.

### **Product Code**

DC Cable PCC-1B: 0770053

### View of PCC-1



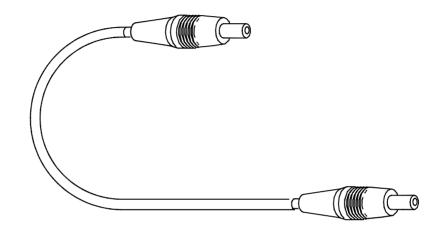
### DC Cable SCB-3

The DC Cable SCB-3 is used to connect the Service Battery to the charger connection Vin of the phone when doing the charger calibration service procedure.

### **Product Code**

DC Cable SCB-3: 0730114

### View of SCB-3



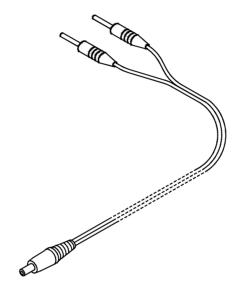
### Power Cable PCS-1

The Power Cable PCS-1 is used to connect the module jigs JBT-1 and JBS-19 to an external power supply.

### **Product Code**

Power Cable PCS-1: 0730012

### View of PCS-1



### **PAMS Technical Documentation**

### External Antenna Cable XRC-1B

The External Antenna Cable is used to connect the transceiver to measuring equipment during servicing.

Note: Typical attenuation at 900 MHz is 0.7 dB. Typical attenuation at 1800 MHz is 0.9 dB.

### **Product Code**

External Antenna Cable XRC-1B: 0730128

### View of XRC-1B



### Light Flash FLC-5 (Sales Pack)

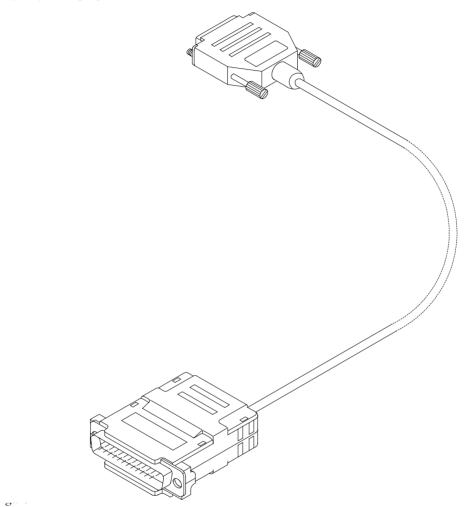
The Light Flash setup is used to:

### Sale package code

Light Flash FLC-5:

0081263

### View of FLC-5



The sales pack includes:

Sales Package	Type Designation of parts	NMP Code
FLC-5		0081263
	Light Flash Cable FLC-5	0770107
	Modular Cable XCM-1	4626131
	Light Flash SW	0774094

### Easy Flash FLE-5

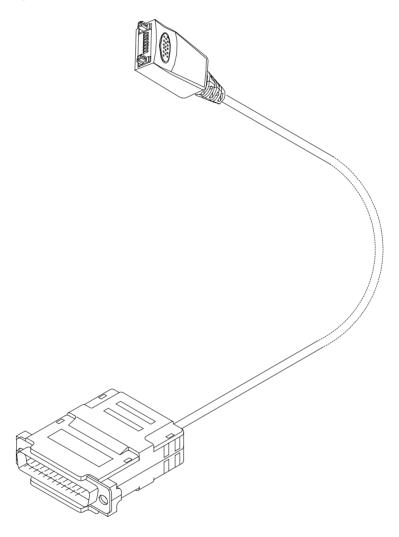
The Easy Flash Adapter FLE-5 is used for flash memory updating.

### **Product code**

Easy Flash FLE-5

0770147

### View of FLE-5



The sales package includes the FLE-5 cable, a diskette, which includes the PC SW that is used in the PC and modular 8 cable, XCM-1.

Sales Package	Type Designation of parts	NMP Code
FLE-5		0080288
	FLE-5	0770147
	XCM-1	4626131
	SW diskette	

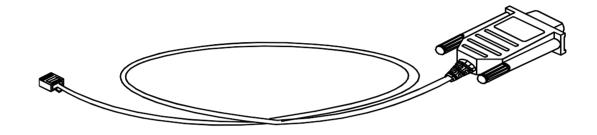
### MBUS Cable DAU-9S

The MBUS Cable DAU–9S has a modular connector, and is used with the service Audio Box JBA–4, or a modular T–adapter.

### **Product Code**

MBUS Cable DAU–9S: 0730108

### View of DAU-9S



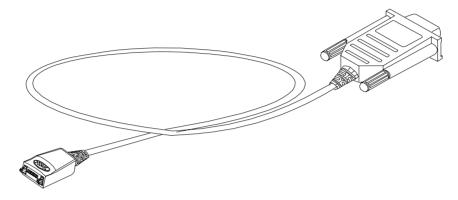
### MBUS Cable DAU-9P

The MBUS Cable DAU–9P has a phone system connector, and is used between the phone and external devices.

### **Product Code**

MBUS Cable DAU–9P: 0730109

### View of DAU-9P



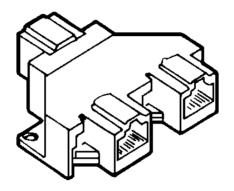
### Modular T-adapter

The modular T-adapter is the branching unit to provide the needed parallel modular connections.

### **Product Code**

Modular T-adapter: 4626134

### **View of Modular T-adapter**



### SW Security Device PKD-1

SW security device is a piece of hardware enabling the use of the service software when connected to the parallel (LPT) port of the PC. Whitout the dongle present it is not possible to use the service software. Printer or any such device can be connected to the PC through the dongle if needed.

Caution: Make sure thet you have switched off the PC and the printer before making connections!

Caution: Do not connected the PKD-1 to the serial port. You may damage your

PKD-1!

### **Product Code**

SW Security Device PKD-1: 0750018

### **View of SW Security Device**

