Programmes After Market Services NHM-3 Series Transceivers

Service Tools

Service Tools

e of Contents vice Tools	Page N
Module Service Jig MJS-23	
Product Code:	
User Instructions	
Important Note:	
Soldering Jig MJS-28 Product Code:	
User Instructions	
Service Battery BBD-2	
Flash Loading Adapter FLA-7 (Sales Pack)	
Sales Package Code	
Flash Prommer FPS-4S (Sales Pack)	
Flash Security Box TDF-4	
Product Code	
IR Data Interface Module JLP-1	
Product Code	
Service Audio Box JBA-4	
Product Code	
Audio Test Cable ADS-1	
Product Code	
DC Cable PCC-1	
Product Code	
DC Cable AXD-1	15
Product Code	
Test Cable XRC-3	16
Product Code	16
D9-D9 Cable AXS-4	17
Product Code	17
D15-D15 Cable AXS-5	18
Product Code	
MBUS Cable DAU-9S	19
Product Code	
MBUS Cable DAU-9P	20
Product Code	
Power Cable PCS-1	
Product Code	
Service Cable SCH-5A	
Product Code	
Warranty Cable SCH-6A	
Product Code	
View of SCH-6	
Modular T-adapter	
SW Security Device PKD-1	
Product Code	
Dongle/Flash Device FLS-2D (Sales Pack)	26

PAMS Technical Documentation

Carria	e Tools	
Servic	E 10015	•

List of Figures

		Page No
Fig 1	View of Service Battery BBD-2	7
Fig 2	View of Flash Loading Adapter FLA-7	8
Fig 3	View of Flash Prommer FPS-4S	9
Fig 4	View of Flash Security Box TDF-4	10
Fig 5	View of IR Data Interface Module JLP-1	11
Fig 6	View of Service Audio Box JBA-4	12
Fig 7	View of Audio Test nCable ADS-1	13
Fig 8	View of DC Cable PCC-1	14
Fig 9	View of DC Cable AXD-1	15
	View of Test Cable XRC-3	
Fig 11	View of D9-D9 Cable AXS-4	17
Fig 12	View of D15-D15 Cable AXS-5	18
Fig 13	View of MBUS Cable DAU-9S	19
Fig 14	View of MBUS Cable DAU-9P	20
Fig 15	View of Power Cable PCS-1	21
Fig 16	View of Service Cable SCH-5A	22
Fig 17	Figure 17. View of Warranty Cable SCH-6A	23
	View of Modular T-adapter	
Fig 19	View of SW Security Device PKD-1	25
Fig 20	View of Dongle/Flash Device FLS-2D	26

PAMS Technical Documentation

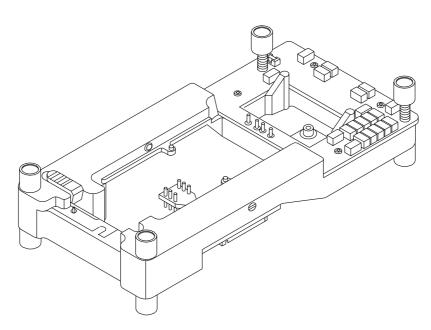
Module Service Jig MJS-23

Product Code:

Module Service Jig

0770241

The Module Service Jig MJS-23 is used at component level repair of system module NHM-3. The jig can be used both with and without the lightquide and keymat mounted. The jig provides the module with supply voltage, RF connection, and connection to the PC or audio text equipment.



View of Module Service Jig MJS-23

Procedure

The jig must be equipped with external cables.

Mount the Antenna Cable XRC-3 located under the steel bracket held by two screws.

Connect the DC Cable PCS-1 to the DC Connector - Check the DC Voltage.

Mount the Service SCH-5 or the DAU-9P cable to the slide.

User Instructions

Insert a SIM Card in the SIM Card Holder

Apply a DC voltage of 3.6V to the DC Connector ensuring the correct polarity

Insert the NHM-3 System Board as follows

- a Insert the top of the PCB into the jig
- b Carefully press the PCB down into the jig by using a thumb on each edge just above the Spring Support Balls..
- c Press other fingures agains the back of the PCB to prevent bending.
- d Ensure the that the two guiding pins in the bottom of the jig are located in the screw holes in the PCB.
- e When the PCB is in position install the bottom connector into it's mounting slot.
- f Lock the Bottom Connector in place using the slide.

Important Note:

Nominal Suply Voltage: 3.6VDC

Maximum Voltage : 5.0 VDC (MJS-23 has overvoltage protection)

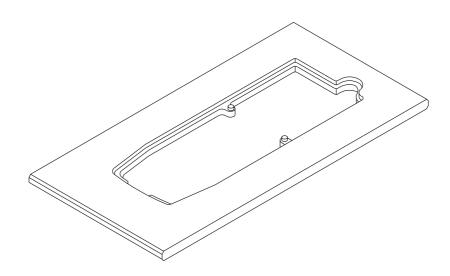
Soldering Jig MJS-28

Product Code:

Soldering Jig MJS-28

0770240

The Soldering Jig MJS-28 is used for replacing the uBGA components on the NHM-3 System Module.



View of Soldering Jig MJS-28

User Instructions

Insert the NHM-3 system board into the MJS-28 Jig

Insert the jig into the uBGA Soldering Station - the jig can also be used for soldering other components to the PCB.

Service Battery BBD-2

Product Code

Service Battery BBD-2

0775222

The Service battery BBD-2 is used in place of the phone's standard battery The Service Battery will supply a controlled operating voltage to the phone for current and charger calibration. The service Battery is also required when flashing the phones software.

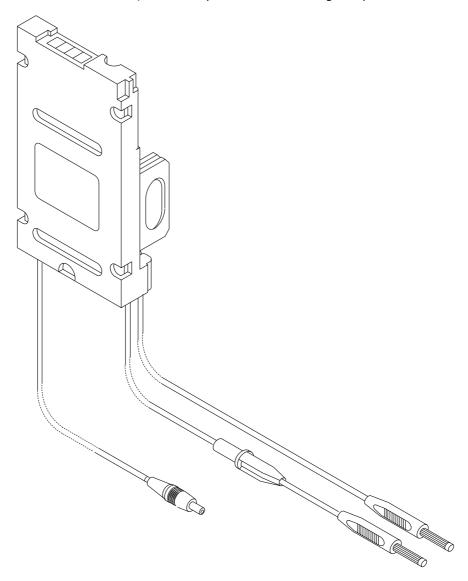


Figure 1: View of Service Battery BBD-2

Flash Loading Adapter FLA-7 (Sales Pack)

The Flash Loading Adapter FLA-7 is used with the Service Battery BBD-2 and Service Cable SCH-5A. Power is supplied to the FLA-7 from the Flash Security Box TDF-4 via the DC cable AXD-1, (The AXD-1 cable can be replaced with a Travel Charger ACH-6), and is connected to the Flash Prommer FPS-4S with the cable AXS-5.

The sales pack includes:

- Flash Loader Adapter FLA-7	0770119
- D15 - D15 Cable AXS-5	0730091
- Power cable SCF-7	0730141
- Service Cable XCM-5	0730142
-DC Cable AXD-1	0730144

Sales Package Code

Flash Loading Adapter FLA-7 0080326



Figure 2: View of Flash Loading Adapter FLA-7

Note: The FLA-5 can also be used with NHM-3

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.

- Flash Prommer FPS-4	0750090
- Printer cable IBM DB25F/57-30360	0730029
- D9 - D9 Cable AXS-4	0730090
- Flash Prommer software 3" disk	0774043
-DC Cable AXD-1	0730144
- Flash Device Support Software 3.5"	0774228

Sales package code

Flash Prommer FPS-4S: 0085095

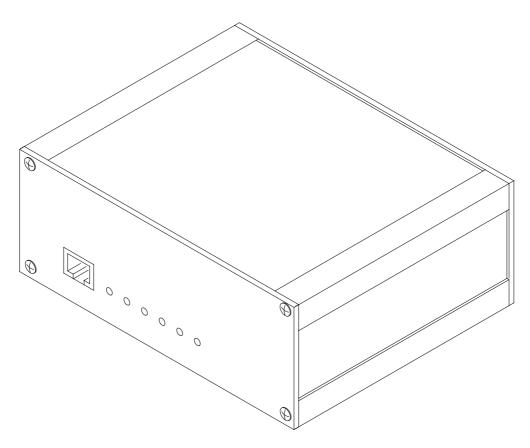


Figure 3: View of Flash Prommer FPS-4S

Flash Security Box TDF-4

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

Note 1: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

Note 2:The infra red module JLP-1 (P/N 0750079) is not included in the TDF-4 sales package.

Product Code

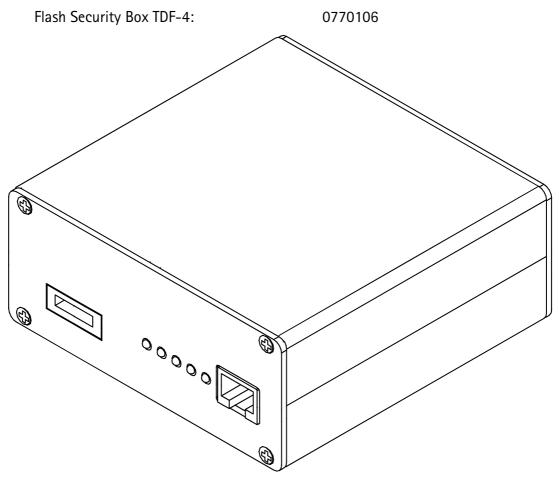


Figure 4: View of Flash Security Box TDF-4

IR Data Interface Module JLP-1

IR Data Interface Module JLP-1 fits in the Security Box TDF-4 and can be used to perform IR tests with Wintesla.

Product Code

IR Data Interface Module JLP-1

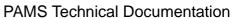
0750079







Figure 5: View of IR Data Interface Module JLP-1



Service Audio Box JBA-4

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

Product Code

Service Audio Box 0770094

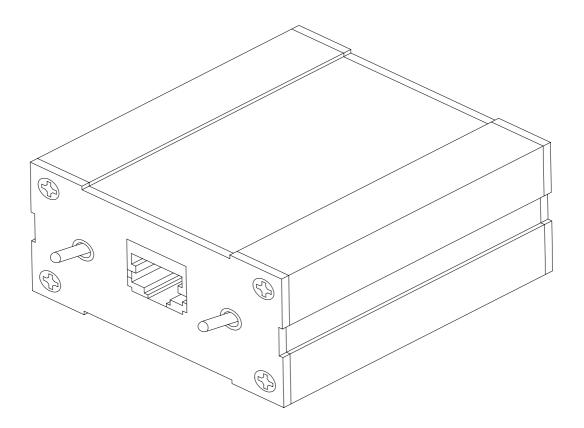


Figure 6: View of Service Audio Box JBA-4

Audio Test Cable ADS-1

Audio Test 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-5A and DAU-9S.

Product Code

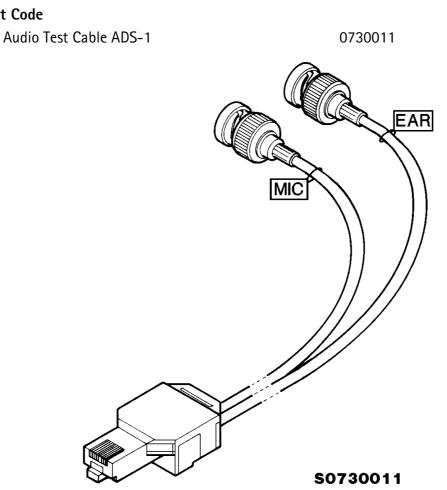


Figure 7: View of Audio Test nCable ADS-1

DC Cable PCC-1

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

Product Code

DC Cable PCC-1 0730053

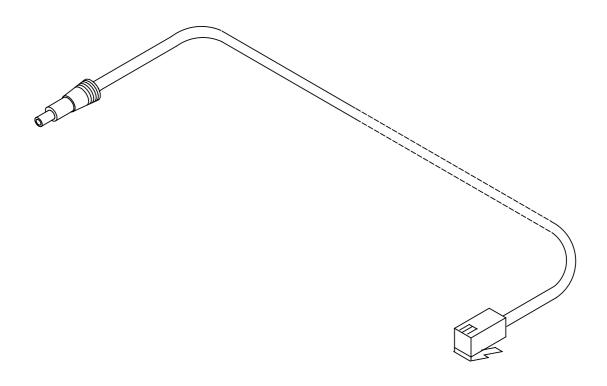


Figure 8: View of DC Cable PCC-1

DC Cable AXD-1

The DC Cable AXD-1 is used e.g. to connect FLA-7 and TDF-4.

Product Code

DC Cable AXD-1 0730144

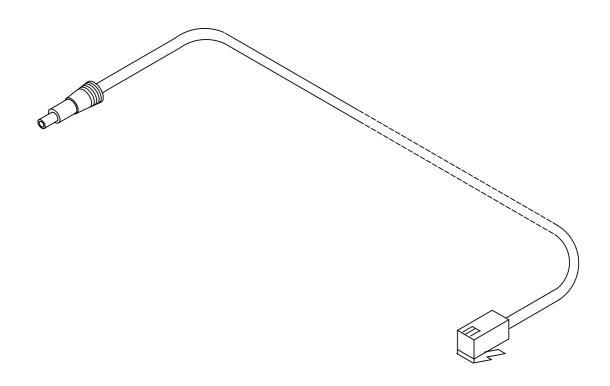


Figure 9: View of DC Cable AXD-1

Test Cable XRC-3

Product Code

Test Cable XRC-3

0730186

The Test Cable XCR-3 is used to connect the transceiver to the measuring equipment during servicing

Note: Typical attenuation at 900 Mhz is 0.7 db.

Typical attenuation at 1800 MHz is 0.9 db

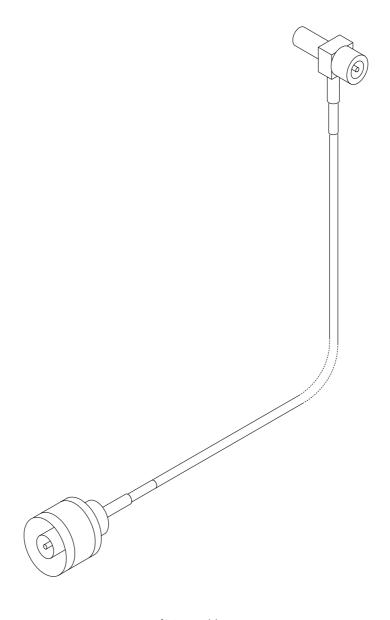


Figure 10: View of Test Cable XRC-3

D9-D9 Cable AXS-4

The D9-D9 cable AXS-4 is used to connect two 9 pin D connectors. e.g. between PC and TDF-4 security box.

Product Code

D9-D9 Cable AXS-4

0730090

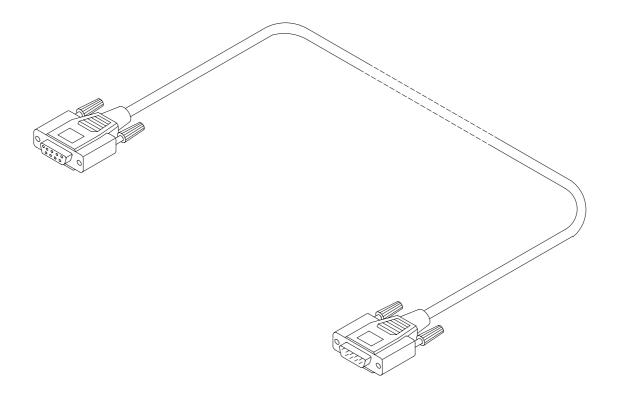


Figure 11: View of D9-D9 Cable AXS-4



D15-D15 Cable AXS-5

The D15-D15 Cable AXS-5 is used to connect two 15 pin D connectors. e.g. between FLA-5/7 and FPS-4S.

Product Code

D15-D15 Cable AXS-5: 0730091

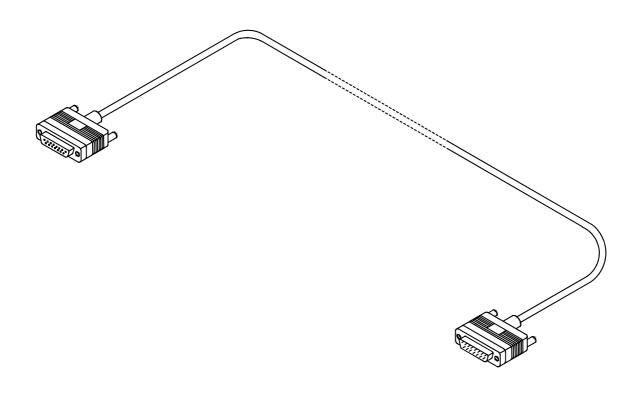


Figure 12: View of D15-D15 Cable AXS-5

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

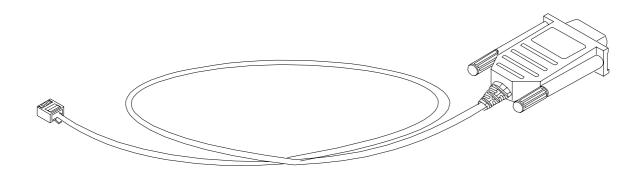


Figure 13: View of MBUS Cable DAU-9S

MBUS Cable DAU-9P

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

Product Code

MBUS Cable DAU-9P

0730109

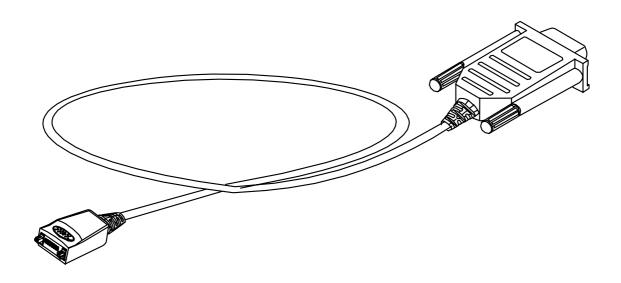


Figure 14: View of MBUS Cable DAU-9P

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. Can be used with FPS-4 also.

Product Code

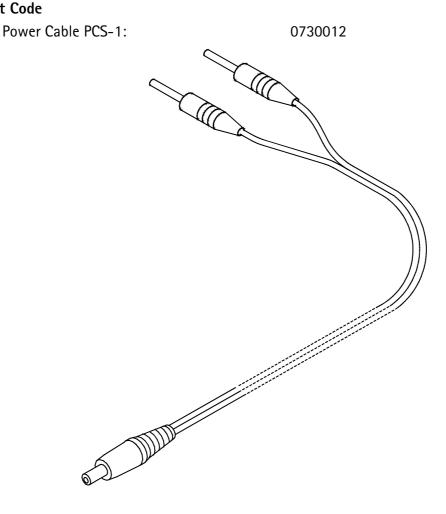


Figure 15: View of Power Cable PCS-1

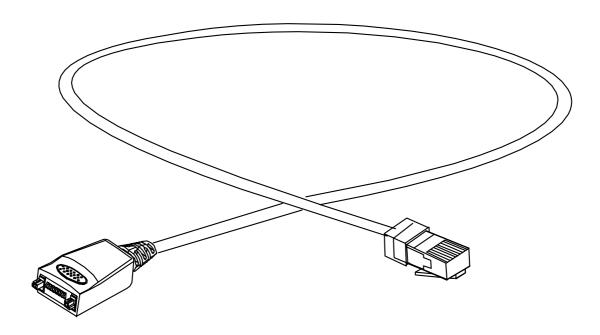
Service Cable SCH-5A

The Service Cable SCH-5A features a lower connector and it 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 FLA-5.

Product Code

Service Cable SCH-5A

0730166



NOTE (SCH-5 can also be used)

Figure 16: View of Service Cable SCH-5A

Warranty Cable SCH-6A

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

Product Code

Warranty Cable SCH-6A: 0730167 (SCH-6 can also be used)

View of SCH-6

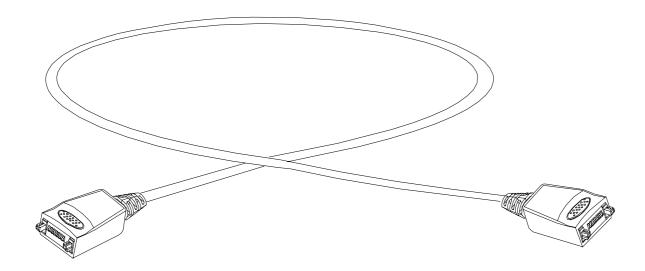


Figure 17. View of Warranty Cable SCH-6A

Service Tools

Modular T-adapter

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

Product Code

Modular T-adapter:

4626134

View of Modular T-adapter

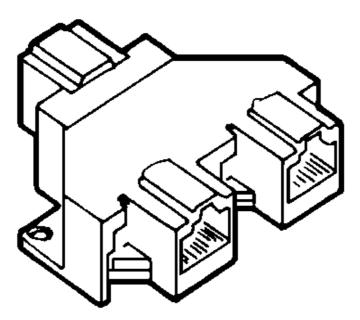


Figure 18: View of Modular T-adapter

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. Whithout 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

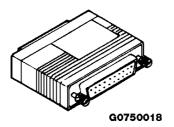


Figure 19: View of SW Security Device PKD-1



Dongle/Flash Device FLS-2D (Sales Pack)

FLS-2D is a dongle and flash device incorporated into one package, developed specifically for POS use.

Product Code

Sales Pack – Europe/Africa 0081311

Sales Pack –APAC 0081310

Sales Pack –US 0081309



Figure 20: View of Dongle/Flash Device FLS-2D

Table 1:

	Item	NMP Code
Sales Pack for Eur/Africa 0081311:		
	FLS-2D Flash Device (Eur/Africa)	0774170
	AXS-4U Service cable DMJ00164	0730163
	SW CD-ROM for FLS-2D Install	0840044
	Blank Sticker 101x48mm. Thermal PL	9380113
	Master Carton DMH00633 OTC swap	9651563
	FLS-2D FLS Instructions (Eur/Africa	9360249

Note: in addition to this Sales Pack, a Service Cable will be required to connect the FLS-2D to the Product/Phone to be flashed, e.g. XMS-3, and a software package to run the flashing process.