PAMS Technical Documentation
NPM–9 Series Transceivers

Service Tools

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JBV-1 Docking Station and MJF-6 Adapter

The JBV-1 Docking Station has been designed for calibration and software update use. The MJF-6 Docking Station Adapter makes signal connections to the phone. JBV-1 and MJF-6 are used as one unit.

JBV-1 main electric functions are:
- adjustable VBATT calibration voltage, current measurement limit voltage ”VCHAR”, current measurement calibration current ”ICHAR”
- adjustable ADC calibration voltage via BTEMP and BSI signal
- BTEMP and BSI calibration resistor
- signals from FBUS to the phone via parallel jig
- control via FBUS or USB
- Flash OK/FAIL indication

In calibration mode JBV-1 is powered by external power supply 11-16V DC. In flashing power for the phone can be taken from FPS-8 or external power supply 11-16V DC.

MJF-6 main electric functions are:
- phone recognizing from BTEMP
- filters of FBUS signals
- SIM CARD reader

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RF-Coubler CPL-4: measured losses

Rohde & Schwarz CMU 200
Phoenix Service Software
Estimated Output levels: EGSM 32 dBm and GSM1800 29dBm

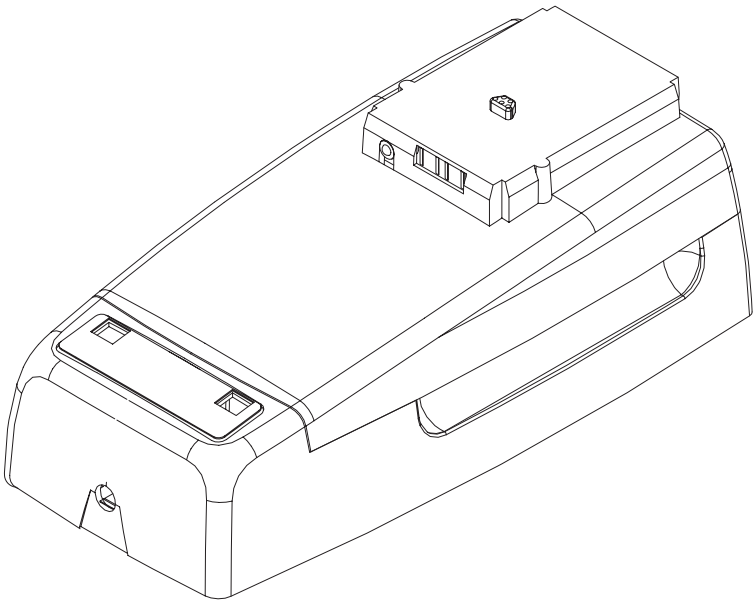
EGSM			GSM1800		
Ch	**Loss**		**Ch**	**Loss**	
	TX	RX		TX	RX
975	6.1 dB	5 dB	512	3.7 dB	3 dB
31	5.1 dB	6 dB	700	3.1 dB	4 dB
124	4.4 dB	6 dB	885	3.0 dB	6 dB

Product Code

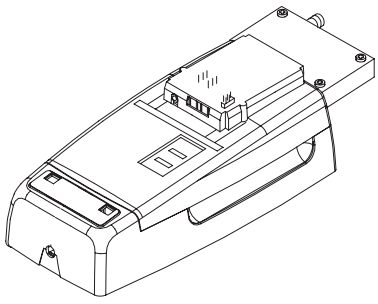
JBV-1 Docking Station: 0770298

MJF-6 Docking Station Adapter: 0770317

View of JBV-1 and MJF-6 together



CPL-4 RF-Coupler: 0770343
CPL-4 is used with JBV-1 and MJF-6 for making RF coupler connection from the phone to measurement equipment.



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MJS-46 Module Jig

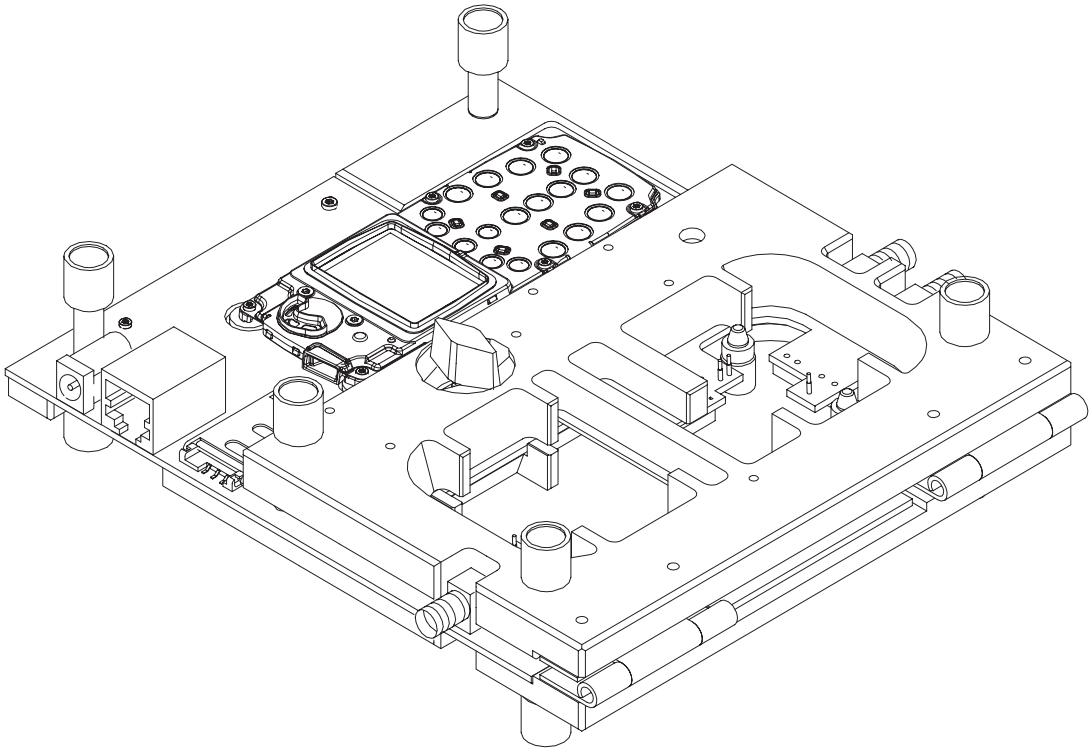
The MJS-46 Module Jig is used for testing of UI/system/RF-module*.

Product Code

MJS-46 Module Jig: 0770316

NOTE: This jig comes with UI module 9490306 for NHM-7. To be able to service NPM-9, you need UI module 0201817 for APAC and 0201868 for Europe.
When installing the UI module, you need to bend the 2 UI module fixings apart (on both sides of the LCD).

View of MJS-46



*Note: The nominal supply voltage for MJS-46 is +8.0 V.
The supply voltage must not exceed +12.0 V (min 5V).
(MJS-46 has overvoltage protection).
For flashing with FPS-8, it is possible to bypass the regulator (jumper).

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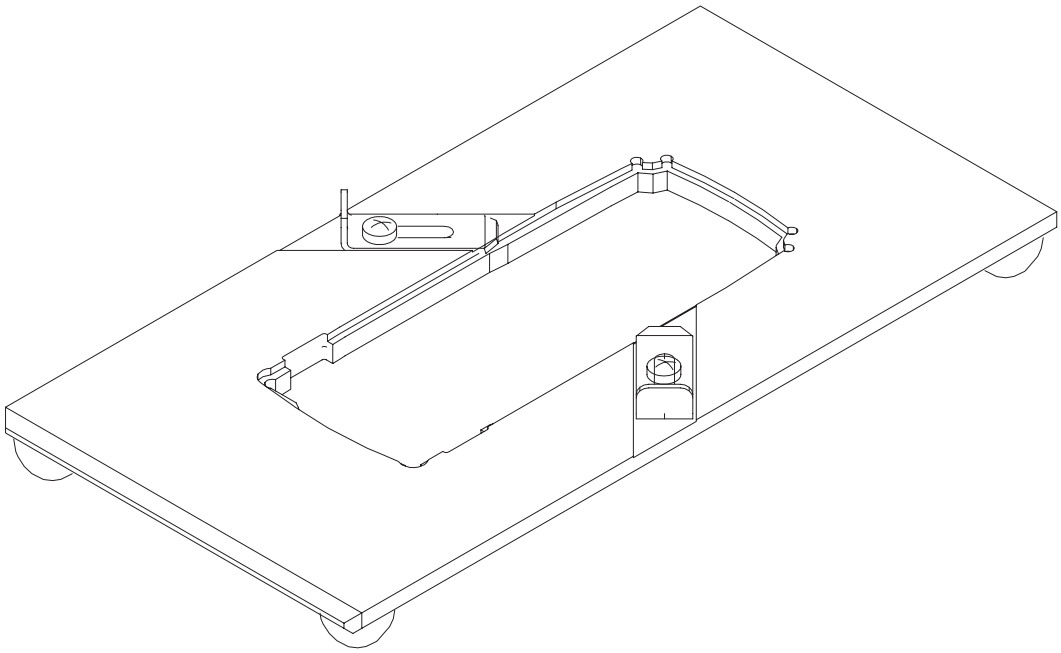
MJS-47 Soldering Jig

The Soldering Jig MJS-47 is used for soldering and as a rework jig for system module.

Product Code

MJS-47 Module Jig: 0770342

View of MJS-47



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LRK-1 Rework Kit

The LRK-1 Rework Kit is used for PA Chip (LGA type component) rework and includes Rework Jig MJS-54, SES-1 Stencil and SPS-1 Soldering Paste Spreader.

The sales pack includes:

MJS-54 Rework Jig:	0770349
SES-1 Stencil:	0770348
SPS-1 Soldering Paste Spreader:	0770381

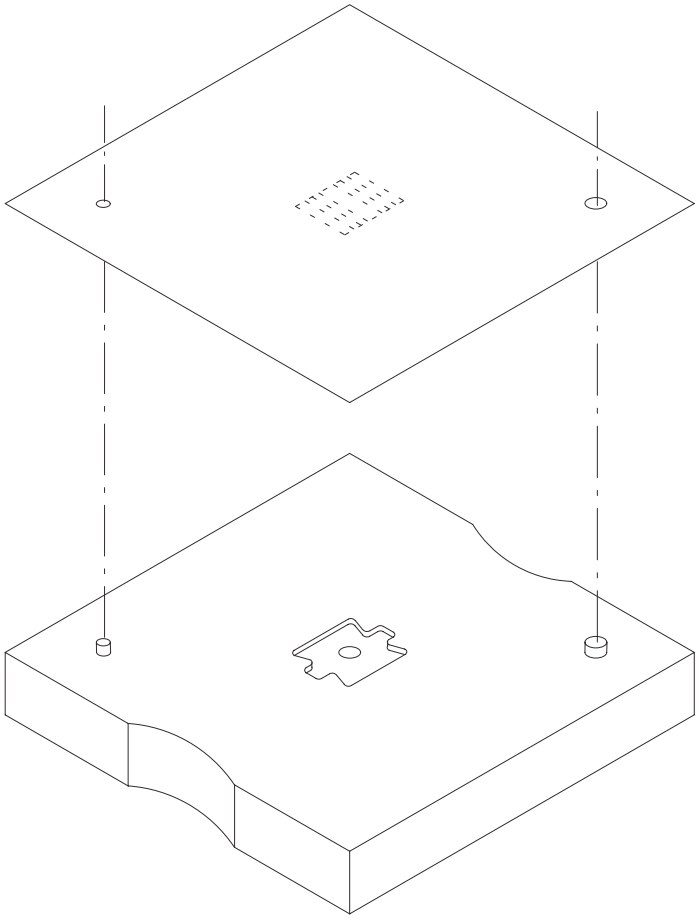
Note: Not included in sales package.

SPI- 1 Soldering Paste Injector	0770380

Sales package code

LRK-1 Rework Kit:	0080465

View of MJS-54 and SES-1



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FPS-8 Flash Prommer (Sales Pack)

The Flash Prommer FPS-8 is used with e.g. FLA-18 and JBV-1. Power is supplied to FPS-8 from the Universal Power Supply.

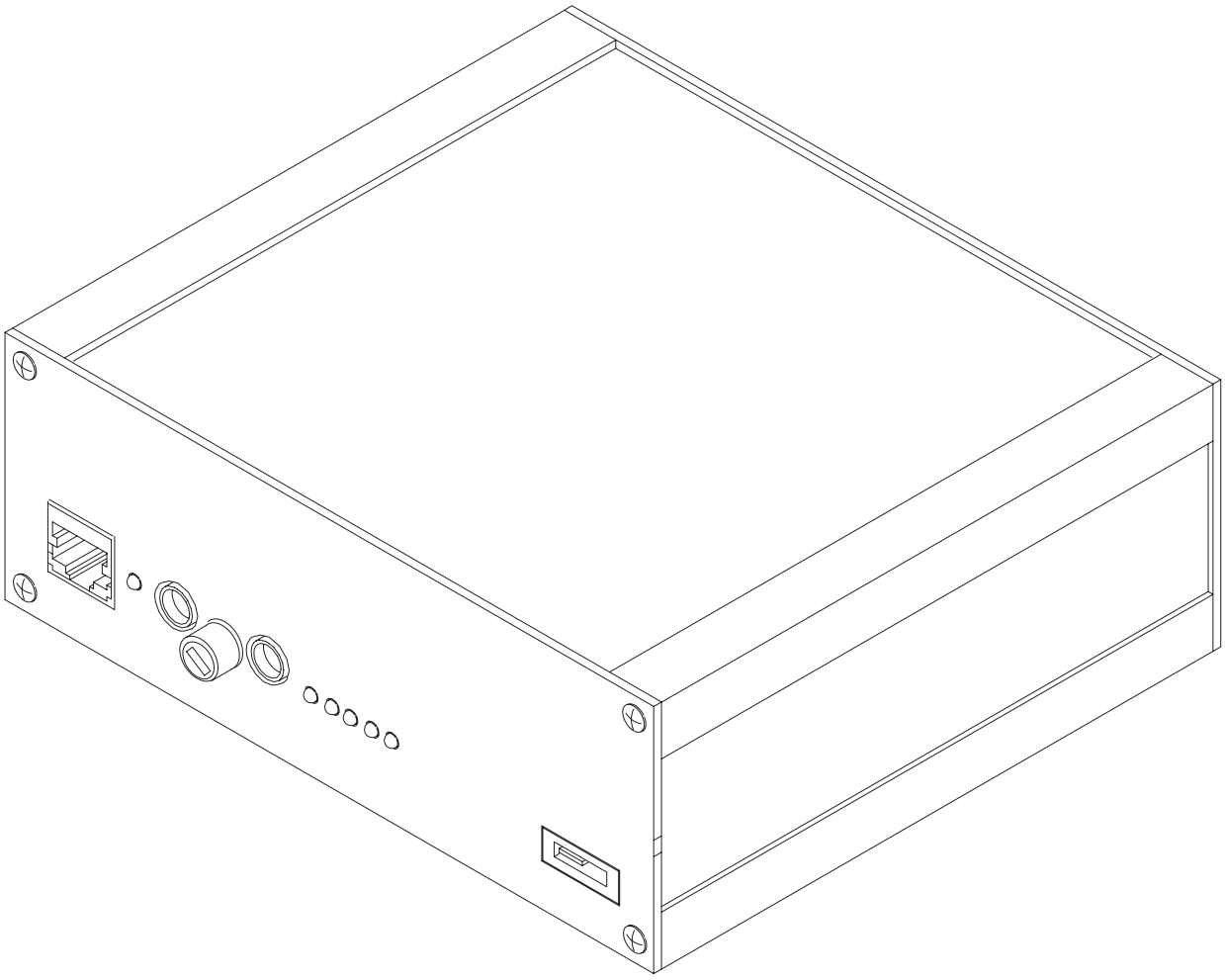
The sales pack includes:

- FPS-8 Flash Prommer	0750123
- FPS-8 Activation Sheet	9359289
- Universal Power Supply	0680032
- AXS-4 Service Cable (D9-D9)	0730090
- Printer cable	0730029

Sales package code

FPS-8 Flash Prommer:	0080321

View of FPS-8



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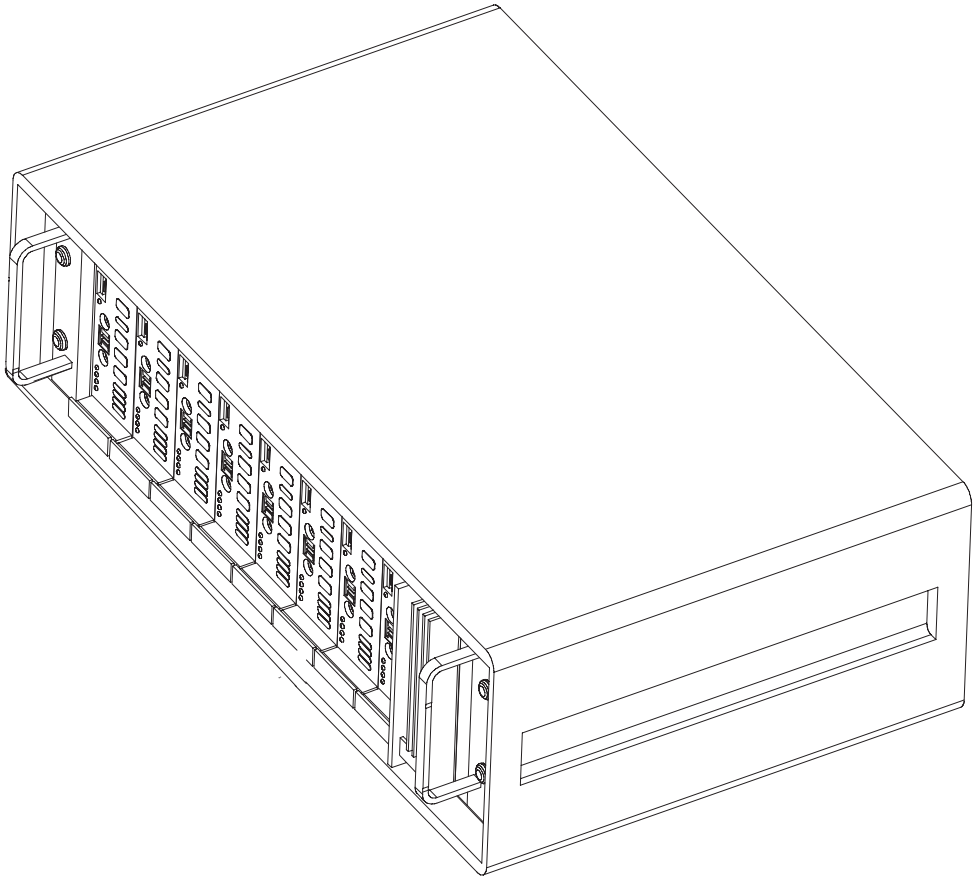
FPS-8C Parallel Flash Prommer (Sales Pack) - optional

The Parallel Flash Prommer FPS-8C is used with MJF-6 and JBV-1. Flash programming can be done to maximum of 8 phones parallel. FPS-8C consists of eight SF11C programming cards. SF11C card is functionally identical to FPS-8.

Sales package code

FPS-8C Parallel Flash Prommer:	0080396

View of FPS-8C



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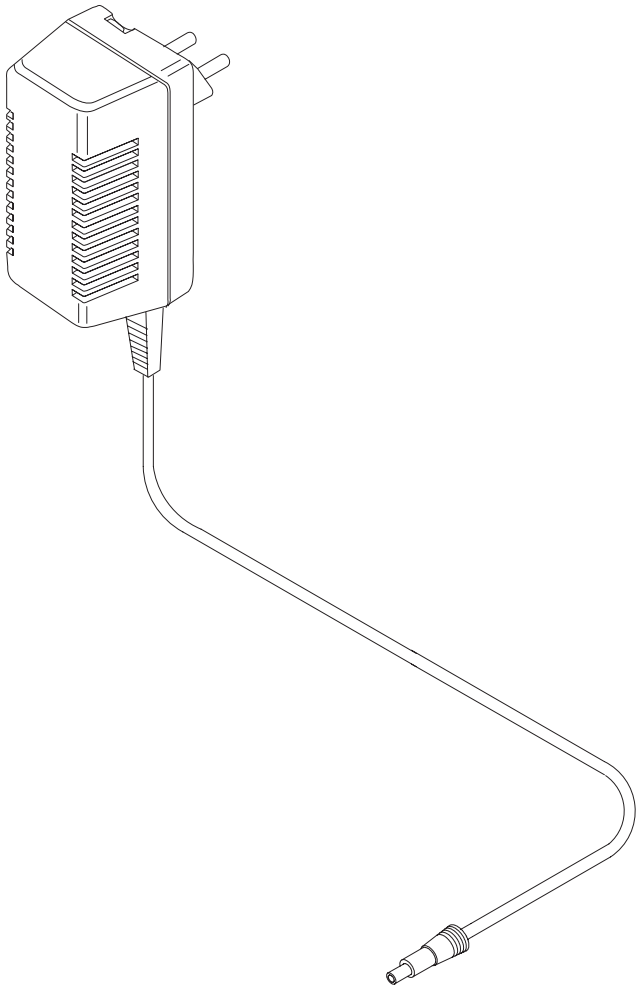
ACF-8 Universal Power Supply

ACF-8 Universal Power Supply is used to power FPS-8. ACF-8 has 6 V DC and 2.1 A output.

Product Code

ACF-8 Universal Power Supply:	0680032

View of ACF-8



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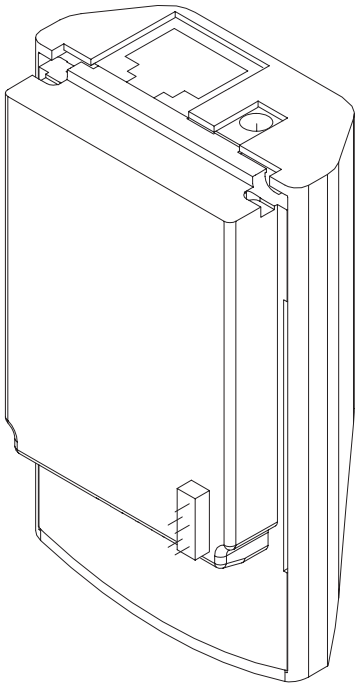
FLA-18 POS (Point Of Sale) Flash Loading Adapter

The POS Flash Loading Adapter FLA-18 is used in place of the phone's normal battery during service, to supply a controlled operating voltage.

Product Code

FLA-18 POS Flash Loading Adapter: 0770318

View of FLA-18



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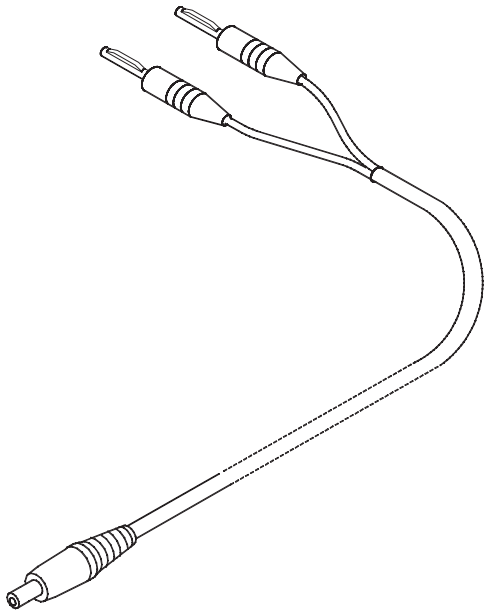
FLC-2 DC Cable

The FLC-2 is used to supply a controlled operating voltage.

Product Code

FLC-2 DC Cable:	0730185

View of FLC-2



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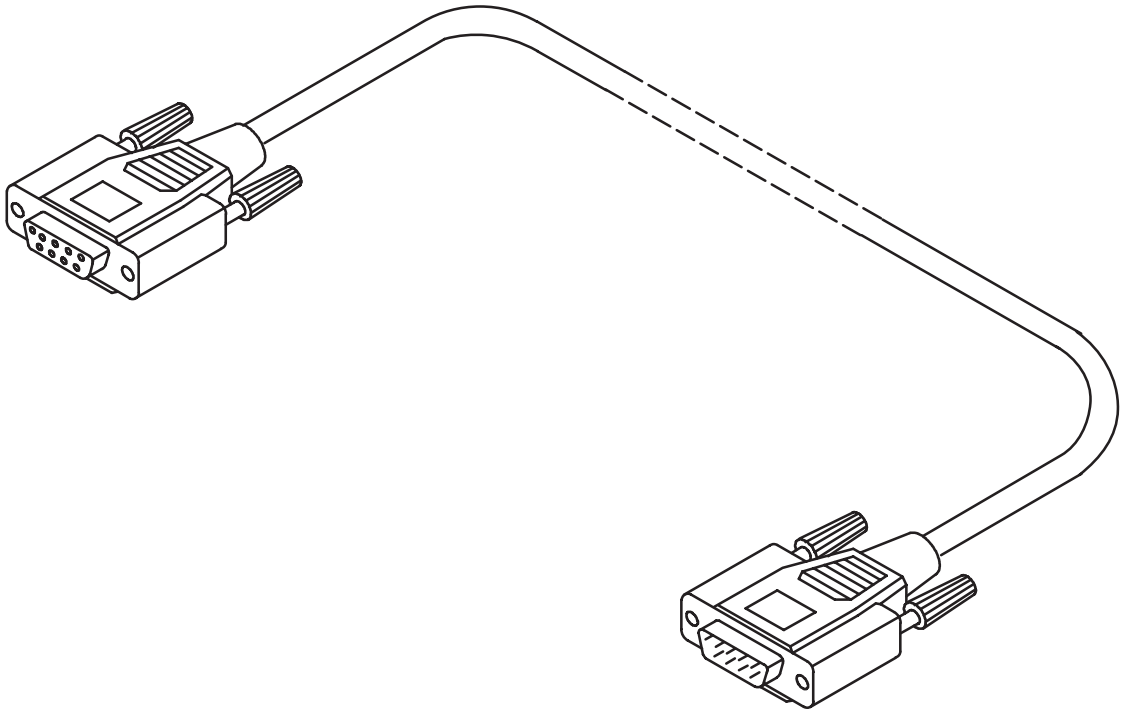
AXS-4 Service Cable

The AXS-4 D9-D9 Service Cable is used to connect two 9 pin D connectors e.g. between PC and FPS-8. Cable length is 2 meters.

Product code

AXS-4 D9-D9 Service Cable: 0730090

View of AXS-4



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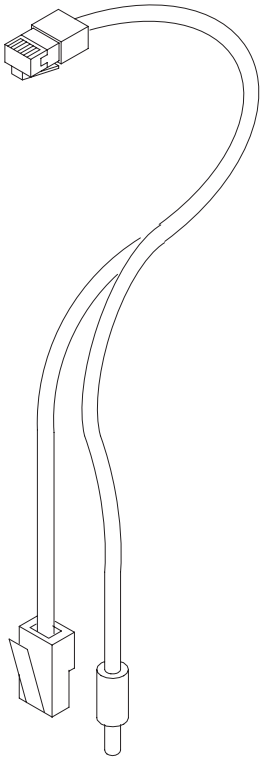
XCS-1 Service Cable

The XCS-1 Service Cable is used to connect FLS-4 to FLA-18.

Product code

XCS-1 Service Cable: 0730218

View of XCS-1



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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.

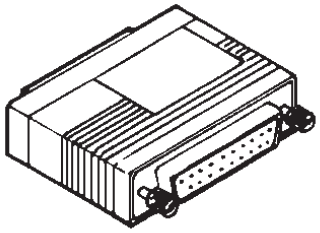
Caution: Make sure that you have switched off the PC and the printer before making connections!

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



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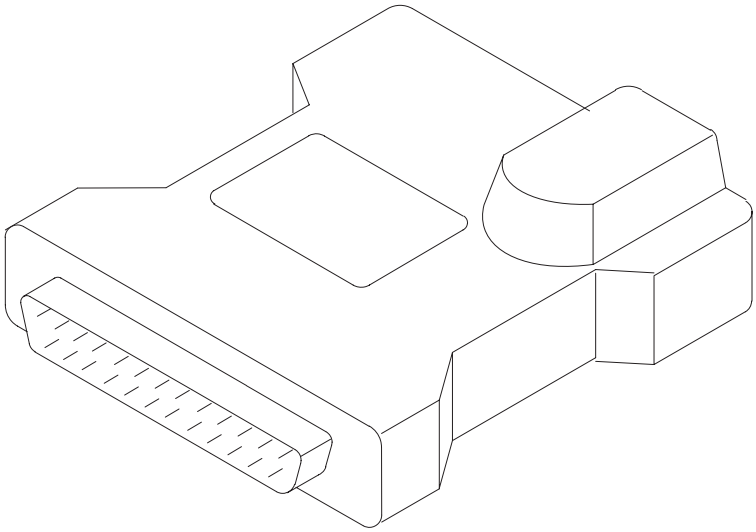
FLS-4 POS (Point Of Sale) Flash Device (Sales Pack)

FLS-4 is a dongle and flash device incorporated into one package, developed specifically for POS use.

Product Code

Sales Pack - Europe/Africa	0081483
Sales Pack -APAC	0081481
Sales Pack -Americas	0081482

View of FLS-4



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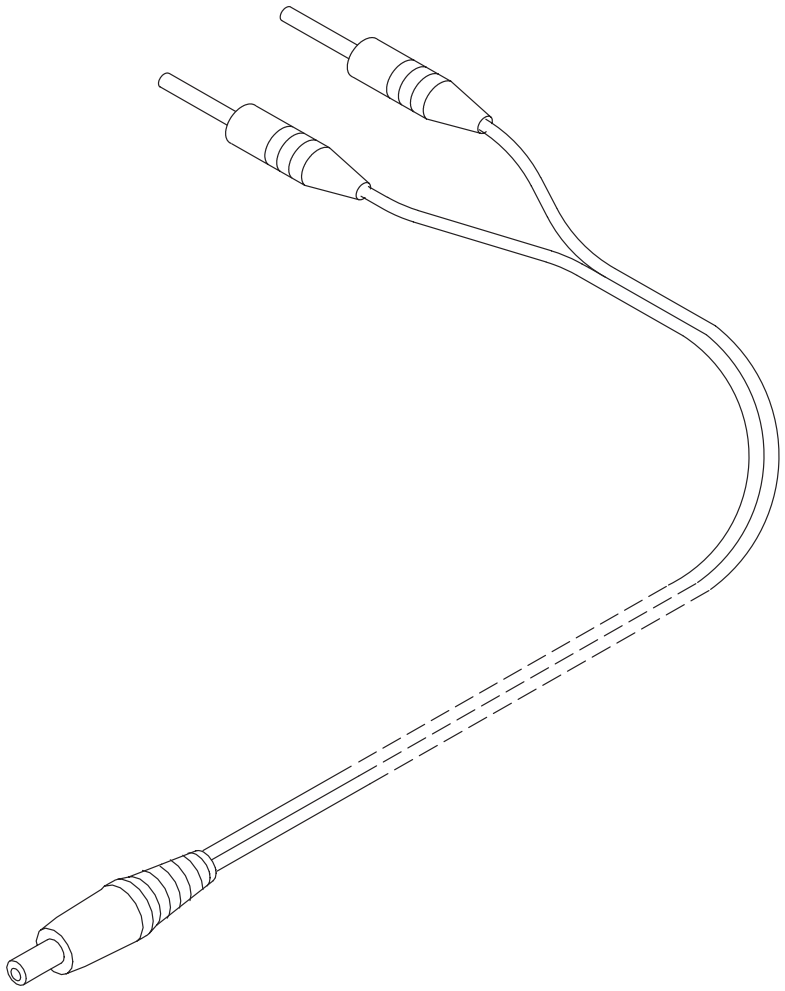
PCS-1 Power Cable

The PCS-1 Power Cable (DC) is used to connect e.g. JBV-1 to FPS-8.

Product Code

PCS-1 Power Cable: 0730012

View of PCS-1



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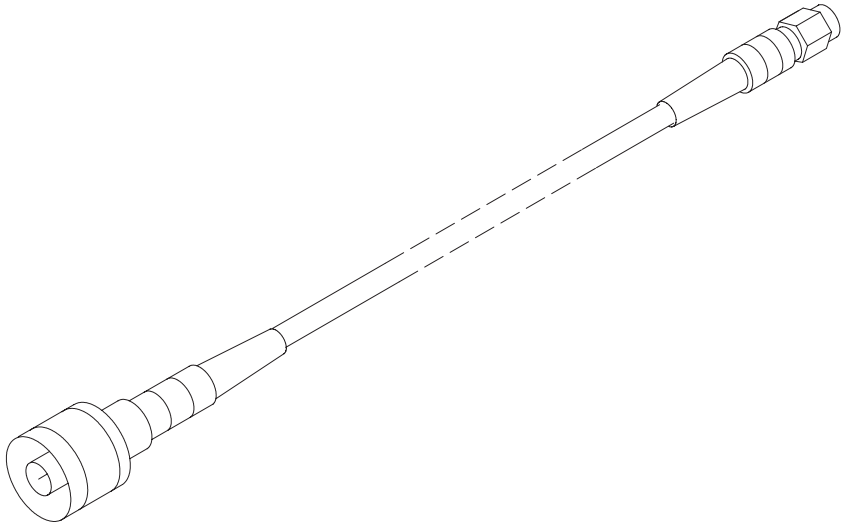
XRF-1 RF Cable

RF cable XRF-1 is used to connect e.g. Module Jig MJS-46 to RF measurement equipment..

Product code

XRF-1 RF Cable:	0730085

View of XRF-1



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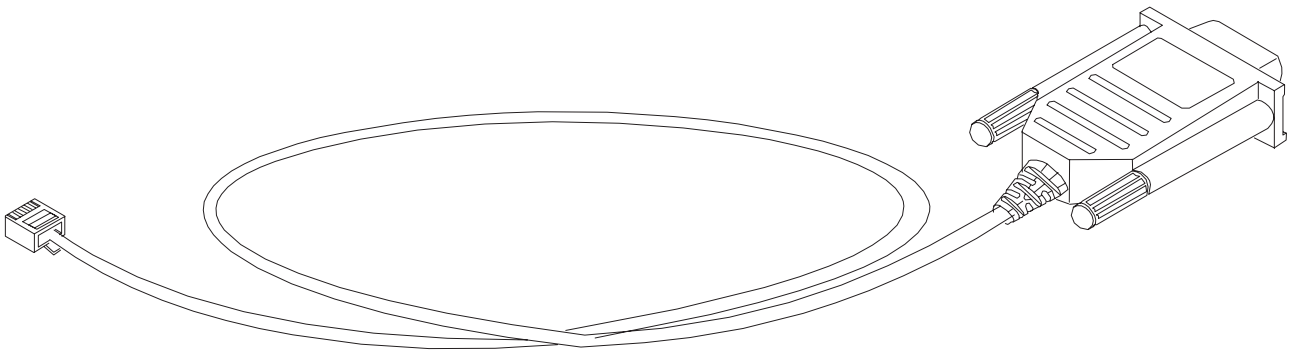
DAU-9S MBUS Cable

The MBUS Cable DAU-9S has a modular connector, and is used with between PC's serial port and e.g. Module Jig MJS-46.

Product Code

DAU-9S MBUS Cable: 0730108

View of DAU-9S



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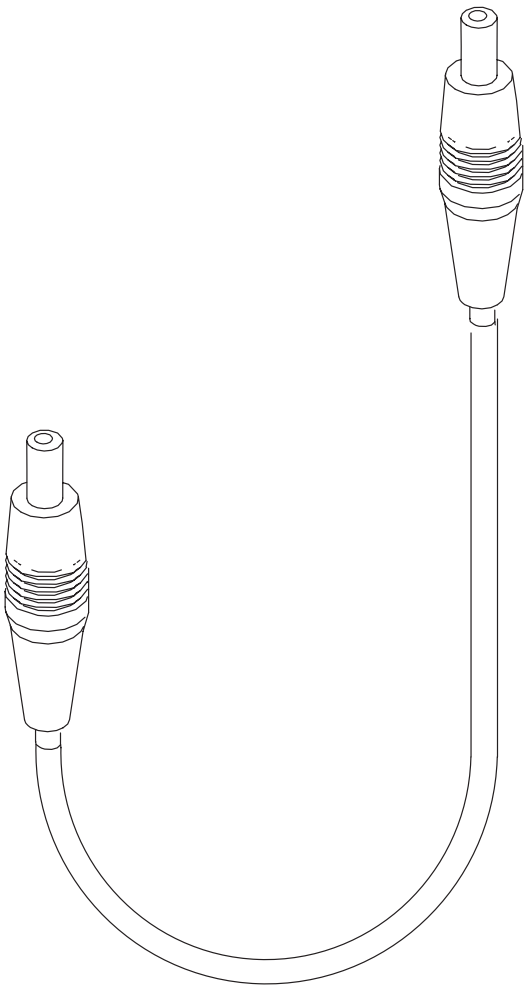
SCB-3 DC Cable

The DC Cable SCB-3 is used to connect e.g. JBV-1 to the phone.

Product Code

SCB-3 DC Cable: 0730114

View of SCB-3



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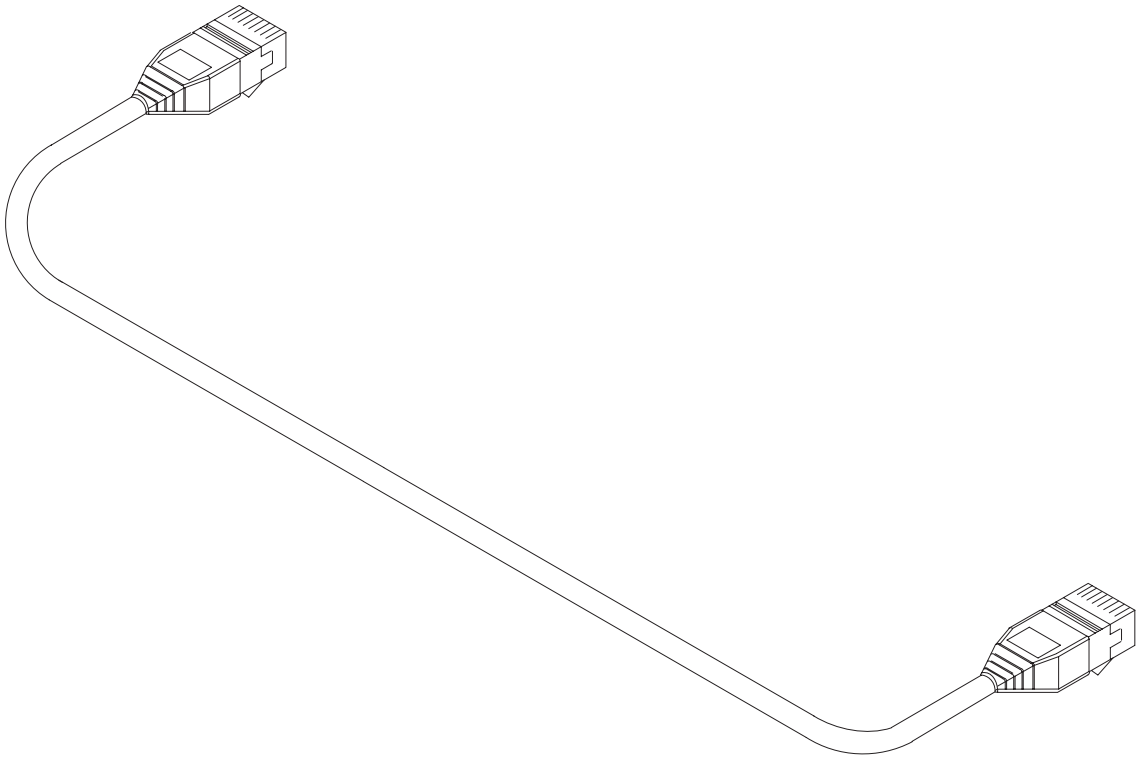
XCS-4 Modular Cable

XCS-4 is a shielded cable (one specially shielded conductor) modular cable for flashing and service purposes.

Product code

XCS-4 Modular Cable:	0730178

View of XCS-4



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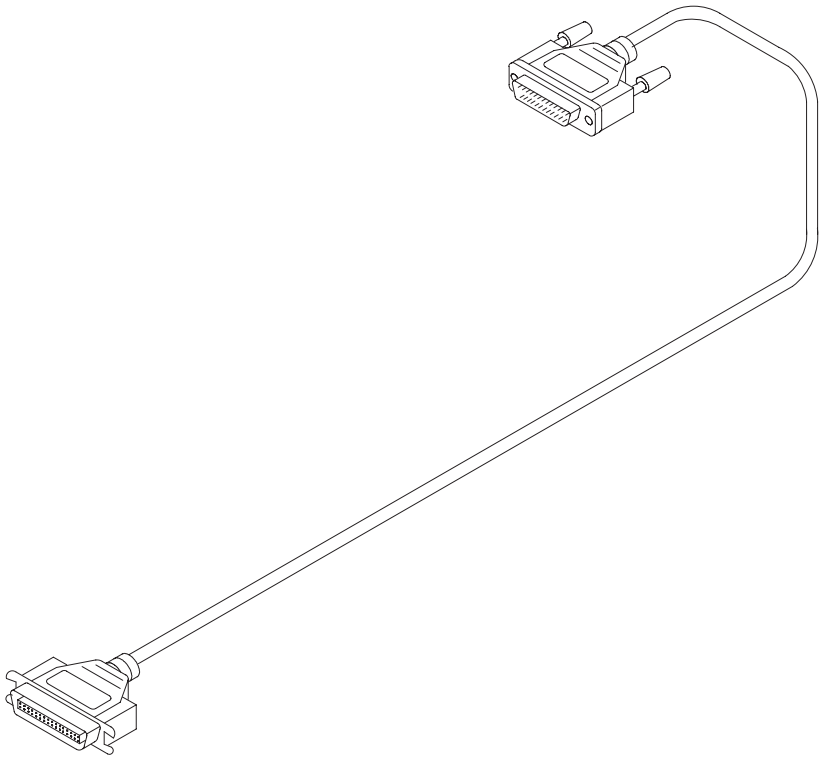
Printer Cable

This cable is used to connect the PC to FPS-8.

Product code

Printer Cable: 0730029

View of Printer Cable



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