

After Sales Technical Documentation

Mobile Base MCH-8

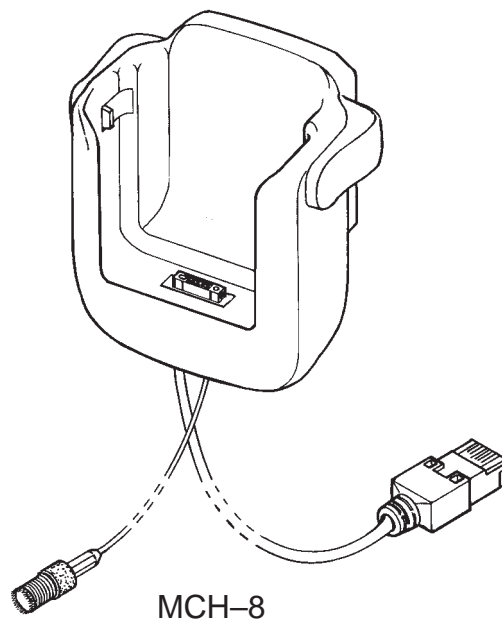
CONTENTS

Mobile Base MCH-8	- 3
Introduction	- 3
Technical Summary	- 3
Technical Specification	- 4
Modes of Operation	- 4
External Signals and Connections	- 4
Junction Box Connector X101	- 4
Handportable Connector X100	- 4
Functional Description	- 5
Circuit Diagram of DH1 (Version 6.0 Edit:19 layout 07)	- 6
Parts List of DH1 (Version 1.3) Code: 0200182	- 7
Exploded View	- 8
Assembly Parts	- 9

Mobile Base MCH-8

Introduction

MCH-8 is the holder unit of the handportable in a mobile environment. The main function of the MBH-8 is to secure the phone firmly in the car and provide a basis for the connection of signals between the phone and the accessories. It connects handportable to junction box, booster and mobile antenna.



Technical Summary

HF operations are possible when transceiver is installed into the mobile base with the HFJ-3 junction box. The battery of the transceiver can be charged via the mobile base.

Technical Specification

Modes of Operation

When handportable is in the MCH-8 holder unit audio signals turn to junction box and rf signal to booster or mobile antenna. Also battery of handportable is charged by junction box through MCH-8.

External Signals and Connections

Mobile base module DH1 has two external connectors, the handportable connector X101 and the junction box connector X102. It also contains one RF connector to connect RF signal/signals to car antenna.

Junction Box Connector X101

Pin:	Name:	Function:
1	BIND	
2	GND	Ground for charger
3	M2BUS	Serial mbus data between handportable, accessories and junction box
4	VC	Supply voltage/charging current for handportable 12 V \pm 1 V or 800 mA \pm 70 mA
5	SHIELD	Cable shield, connected to GND
6	AGND	Signal ground
7	XMIC/JCONN	Audio signal from junction box to handportable, d.c. level indicates connection of junction box to handportable
8	XEAR/HFPWR	Audio signal from handportable to junction box, current sink from this pin to handportable turns on +5 V supply voltage in junction box

Handportable Connector X100

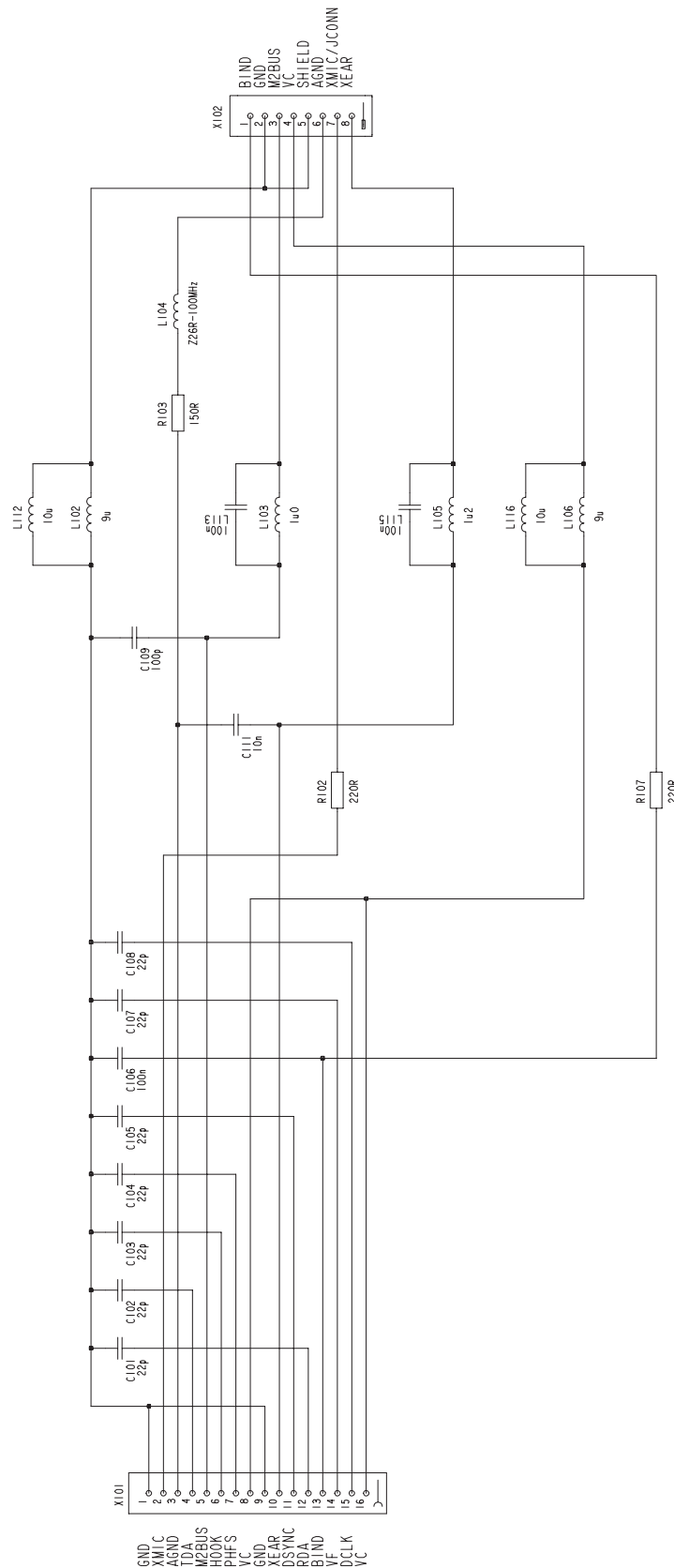
Pin:	Name:	Function:
1	GND	Logic ground, ground for charger
2	XMIC	Audio signal from junction box to handportable, d.c. level indicates connection of junction box to handportable
3	AGND	Signal ground
4	TDA	NC

5	M2BUS	Serial mbus data between handportable, accessories and junction box
6	HOOK	NC
7	PHFS	NC
8, 16	VC	Supply voltage/charging current for handportable 12 V \pm 1 V or 800 mA \pm 70 mA
9	GND	Ground
10	XEAR	Audio signal from handportable to junction box, current sink from this pin to handportable turns on +5 V supply voltage in junction box
11	DSYNC	NC
12	RDA	NC
13	BIND	
14	VF	NC
15	DCLK	NC

Functional Description

The DH1 module contains filtering for signals between handportable and junction box/booster. Handportable is connected to DH1 by connector X100 and junction box and booster by connector X101. RF signal from handportable to mobile antenna or booster is connected by the special RF cable.

Circuit Diagram of DH1 (Version 6.0 Edit:19) (for layout version 07)

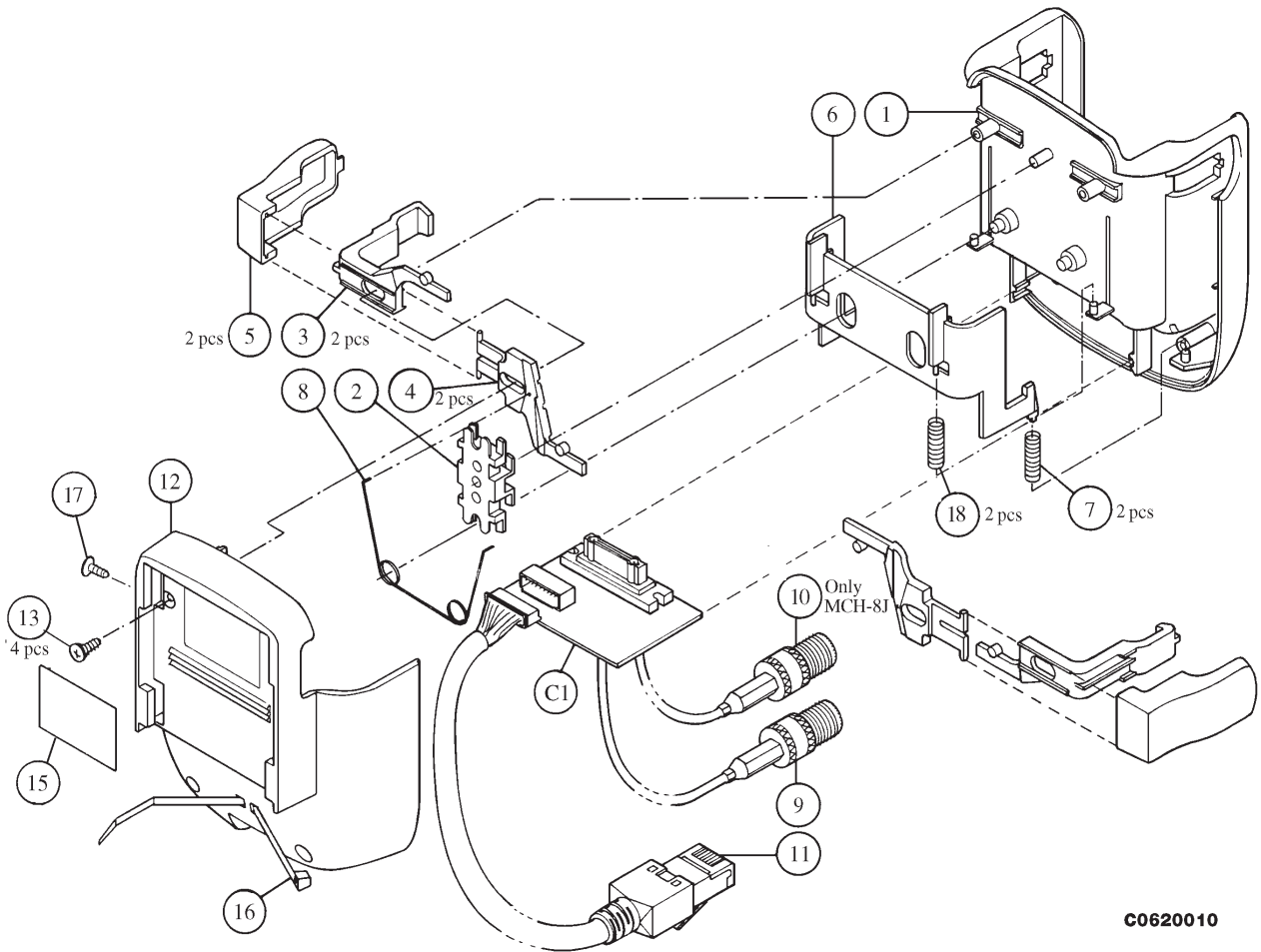


Parts List of DH1 (Version 1.3)

Code: 0200182

ITEM	CODE	DESCRIPTION	VALUE	TYPE
R102	1413924	Chip resistor	220	5 % 0.1 W 0805
R103	1413917	Chip resistor	150	5 % 0.1 W 0805
R107	1413924	Chip resistor	220	5 % 0.1 W 0805
R108	1411645	Chip resistor	560	5 % 0.12 W 1206
C101	2310343	Ceramic cap.	22 p	5 % 50 V 0805
C102	2310343	Ceramic cap.	22 p	5 % 50 V 0805
C103	2310343	Ceramic cap.	22 p	5 % 50 V 0805
C104	2310343	Ceramic cap.	22 p	5 % 50 V 0805
C105	2310343	Ceramic cap.	22 p	5 % 50 V 0805
C106	2310784	Ceramic cap.	100 n	10 % 25 V 0805
C107	2310343	Ceramic cap.	22 p	5 % 50 V 0805
C108	2310343	Ceramic cap.	22 p	5 % 50 V 0805
C109	2310424	Ceramic cap.	100 p	5 % 50 V 0805
L103	3641306	Chip coil		5 % Q=33/25 MHz 1008
L104	3606946	Ferrite bead 0.2r 26r/100mhz	1206	1206
L106	0164030	Choke	9 u	
X101	5469778	Accessory connector hd720	smd	SMD
X102	5416638	Connector 8-pole right angle	1.5	1.5
	9853923	PCB DH1 29.5X42X1.6 D 12/PA		
	9853923	PC board	DH1	29.5x42x1.6 d 12/pa

Exploded View



C0620010

Assembly Parts

ITEM	Q'TY	CODE	DESCRIPTION	VALUE, TYPE
1		9450280	Front cover	1D 23116
2		9460094	Synchro element	1D 23119
3	2	9460093	Locking knob	1D 23118
4	2	9460095	Release slide	2D 23357
5	2	9450278	Release button	1D 23117
6		9460135	Pushing slide	1D 24549
7	2	6400088	Slide spring	4D 24036
8		9560013	Spring	4D 23226
9, 10		9780089	RF cable	4C 22839
11		9780088	HFJ cable	4C 22493
12		9450279	Bottom cover	1D 23115
13	4	6293010	PT screw	KB22x8 FeZn black
15		9380154	Type label (print made in Finland 4D 23469) Nokia	
15		9380154	Type label (print made in Finland 4D 23527) AT&T	
15		9380154	Type label (print made in Scotland 4D 25712)	
15		9380154	Type label (print made in USA 4D 25893) Nokia	
16		6400318	Cable tie	2.3x80 black
17		6293447	PT screw	KB22x5 FeZn blk
18	2	9560012	Slide spring	4D 23359
C1		0200182	Mobile base module DH1	

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