



Mobile Siren MS-350

for undercover application

Operating Manual

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1.1 Description



The mobile siren MS-350 is based on the latest digital circuit technology. This allows maximum sound pressure level with minimum power consumption. All common special signals are available.

The MS-350 can also be integrated into the tried and tested TOPas and ZIRKON light bars and can be connected either via a data bus or via parallel wires.

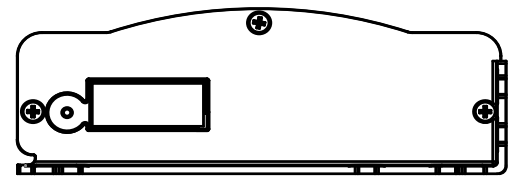
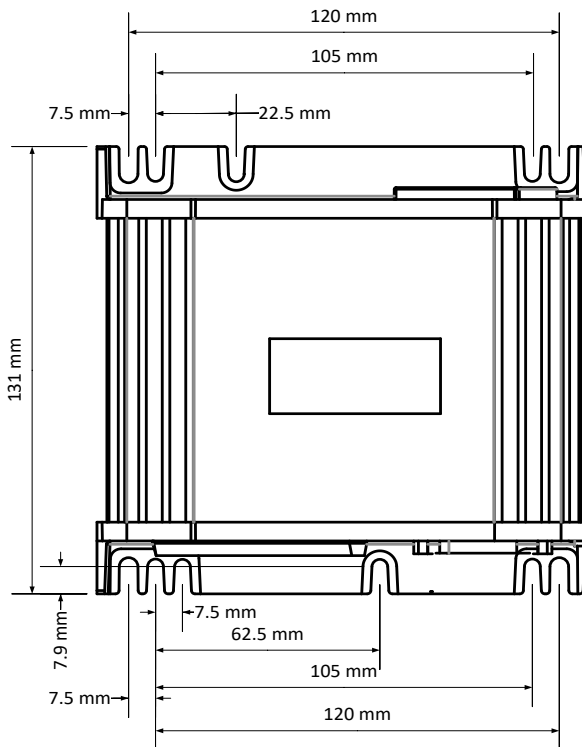
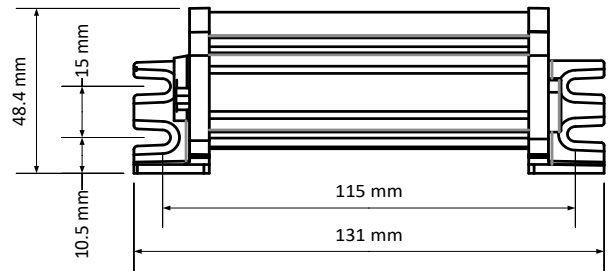
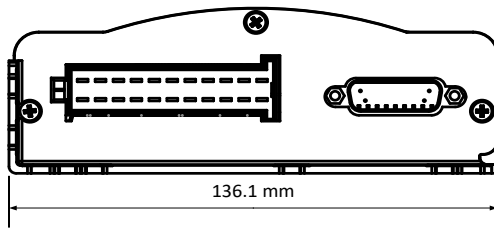
The mobile siren system consists of:

- Control-Unit MS-350
- 1 or 2 Loudspeaker K-SR 350
- Cable-Harness ZKA-3xx (see drawing in Chapter 9.3)

Various devices can be used as control panels:

- separate, vehicle-specific switches
- Control-Panel BT-120/121
- Control-Panel BT-210
- Data bus controlled Control-Panels BT-200, BT-C 200, BT-C 121, BT-220 etc.

1.2 Control-Unit MS-350



The Control-Unit can be installed as desired in the vehicle interior or vehicle engine compartment.

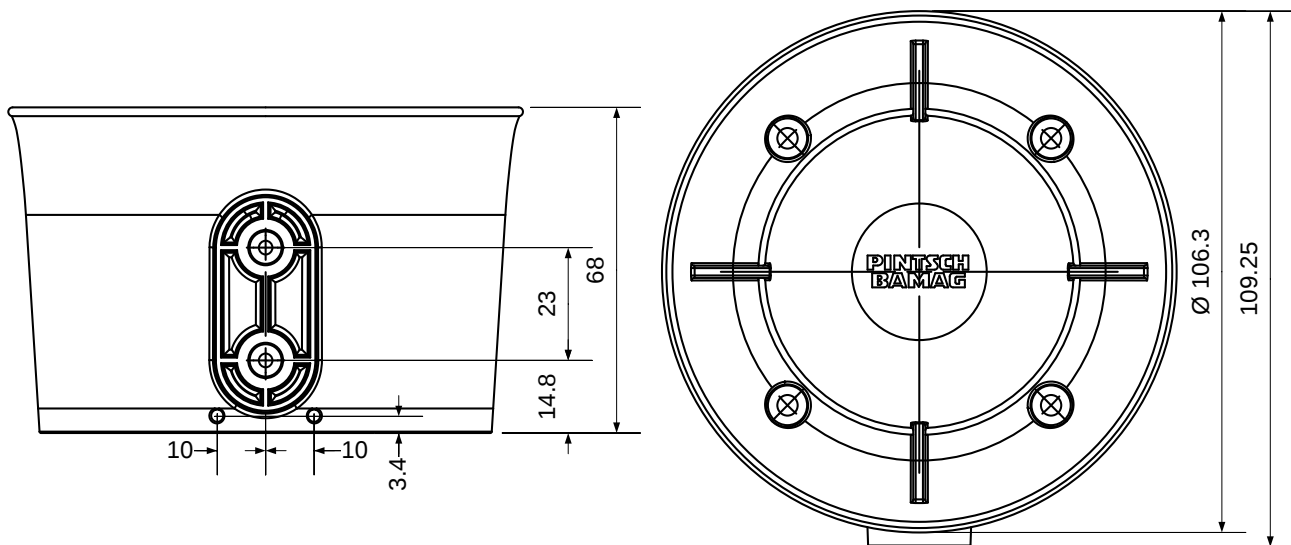
Common places are:

- under the glove compartment
- in the luggage compartment
- under one of the front seats
- in the centre console

Due to the housing design, the Control-Unit can be variably attached and connected to the vehicle with 4 screws. Care must be taken to ensure good accessibility of the connectors.

The electrical connection can be carried out using the connection diagrams in chapter 6. The available vehicle cable harness ZKA 3xx is helpful. A drawing of the cable harness is given in the chapter 9.3. Part Number: 50108400012.

1.3 Loudspeaker K-SR 350



The speakers can be easily mounted in the car.

Common places are:

- in wheel arch of front wheels
- behind the radiator grille
- in the front bumper

During assembly, care must be taken that the sound can be radiated forward as unimpeded as possible. Any obstruction leads to sound pressure losses!

2.1 Connector MS-350



X1 Connector

(Typ : 8288801-7 – 22 pin – male)

X2 Connector

(Typ : SUB-D – 15 pin – male)



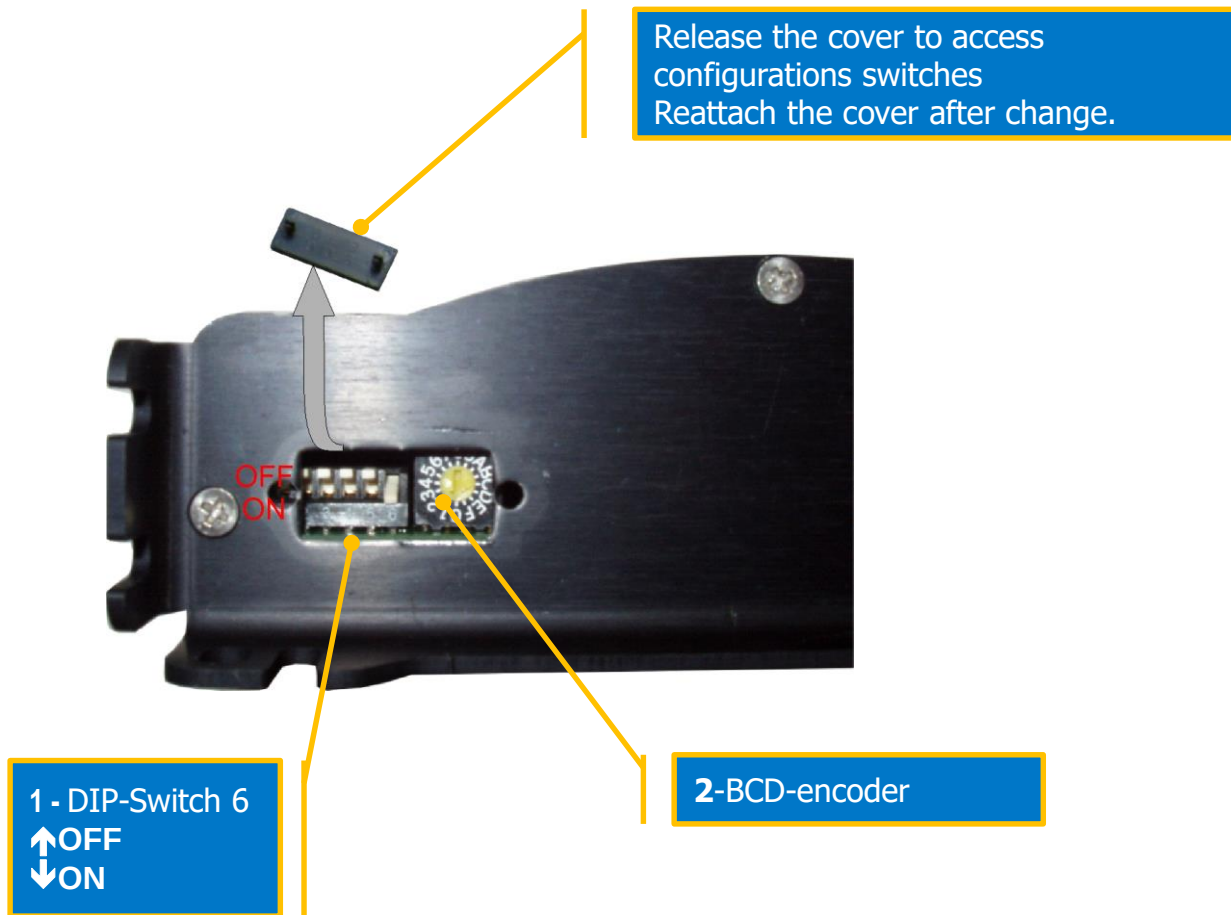
X1 Connector – (Typ : 8288801-7 – 22 pin – male)

Pin	Function	I/O	I _{max}	Pin	Function	I/O	I _{max}
1	+ OUT 2	O	6 A	12	- Loudspeaker right	O	5 A
2	+ OUT 1	O	6 A	13	+ IN 1	I	< 20 mA
3	+U _B for OUT 1 and 2	I	< 20 A	14	Ground MS-350	I	10 A
4	+U _B for OUT 1 and 2	I	< 20 A	15	- IN 1	I	< 20 mA
5	+ IN / OUT 4	I/O	2 A	16	+U _B MS-350	I	10 A
6	+ IN / OUT 3	I/O	2 A	17	+ IN 2	I	< 20 mA
7	+ IN / OUT 2	I/O	2 A	18	+ IN 7	I	< 20 mA
8	+ IN / OUT 1	I/O	2 A	19	+ IN 3	I	< 20 mA
9	- Loudspeaker left	O	5 A	20	+ IN 6	I	< 20 mA
10	+ Loudspeaker left	O	5 A	21	+ IN 4	I	< 20 mA
11	+ Loudspeaker right	O	5 A	22	+ IN 5	I	< 20 mA

X2 Connector – (Typ : SUB-D – 15 pin – male)

Pin	Funktion	I/O	I _{max}	Pin	Funktion	I/O	I _{max}
1	+U _B for external devices	O	< 200 mA	9	Ground for external devices	O	< 200 mA
2	+ PTT (audio active for NF1)	I	< 20 mA	10	+ PTT (audio active for NF2)	I	< 20 mA
3	NF1 – high, 4 mV	I	< 20 mA	11	NF1 – low, 4 mV	I	< 20 mA
4	NF1 - Shield	-		12	NF2 – low, 400 mV	I	< 20 mA
5	NF2 – high, 400 mV	I	< 20 mA	13	CAN-Bus low	I/O	< 100 mA
6	NF3 BUS – high, 1 V	I	< 20 mA	14	NF3 BUS, low, 1 V	I	< 20 mA
7	PB-Bus low	I/O	< 100 mA	15	CAN-Bus high	I/O	< 100 mA
8	PB-Bus high	I/O	< 100 mA				

2.2 Configuration DIP-Switch



The functionality of the DIP-Switch 6 (Pos. 1) and the BCD-encoder (Pos. 2) are listed in section 2.

Attention!
After every change of the DIP/BCD switches remove and reconnect power to the MS-350.

DIP-Switch			
DIP	Function	OFF	ON
1	CAN-termination	Not active	active
2			
3	Priority	PA stopps Signal	Signal overrides PA
4	Signal tone	width (high tune)	small (low tune)
5	Overserve loudspeaker	2 loudspeaker	1 loudspeaker (left channel)
6	Preset	Config 1 ... 16	Config 17 ... 32

Preset	N°.	1	2	3	4	5	6	7	8
DIP6		OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
BCD	0		1	2	3	4	5	6	7
Description	Test		DIN	F - Ambulance	F - Fire-Brigades	F - Police	F - UMH	F - Gendarmerie	NL - 2-Tone KLDP 1
Signal	Test		DIN	F - Ambulance	F - Fire-Brigades	F - Police	F - UMH	F - Gendarmerie	NL 2-Tone
Night signal volume reduction related to day volume	50%		50%	50%	50%	50%	50%	50%	25%
Signal (DIP4)	preset (DIP4)		preset (DIP4)	preset (DIP4)	preset (DIP4)	preset (DIP4)	preset (DIP4)	preset (DIP4)	preset (DIP4)
IN/UT	IN1 (X1.13 + / X1.15 -)	Signal on	Horn / activation of signal	Signal on	Signal on	Signal on	Signal on	Signal on	Horn
	IN2 (X1.17)	Beacon on	Beacon on	Beacon on	Beacon on	Beacon on	Beacon on	Beacon on	Beacon on
	IN3 (X1.19)	Standby	Ignition on	-	-	-	-	-	Ignition on
	IN4 (X1.21)	Test DIP	Test	Test	Test	Test	Test	Test	Test
	IN5 (X1.22)	Test BCD	YELP	Signal on	Signal on	Signal on	Signal on	Signal on	Signal on
	IN6 (X1.20)	NE BUS	S/L (or backlight on if BT210)	backlight on	backlight on	backlight on	backlight on	backlight on	Ext. Beacon indic.
	IN7 (X1.18)	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night
	IN8 (X2.2)	PTT microphone	PTT microphone	PTT microphone	PTT microphone	PTT microphone	PTT microphone	PTT microphone	PTT microphone
	IN9 (X2.10)	radio on	radio on	radio on	radio on	radio on	radio on	radio on	radio on
OUTPUT	OUT 1 (X1.2) - 6 Amp	beacon	beacon	beacon	beacon	beacon	beacon	beacon	beacon
	OUT 2 (X1.1) - 6 Amp	beacon	beacon	beacon	beacon	beacon	beacon	beacon	frontflash
IN/ OUT	IN / OUT 1 (X1.8) - 2 Amp	LS contr. 2	F3 (BT210)	F3 (BT210)	F3 (BT210)	F3 (BT210)	F3 (BT210)	F3 (BT210)	F3 (BT210)
	IN / OUT 2 (X1.7) - 2 Amp	beacon contr. R	beacon contr. R	beacon contr. R	beacon contr. R	beacon contr. R	beacon contr. R	beacon contr. R	F2 (BT210)
	IN / OUT 3 (X1.6) - 2 Amp	beacon contr. L	beacon contr. L	beacon contr. L	beacon contr. L	beacon contr. L	beacon contr. L	beacon contr. L	beacon contr. L
	IN / OUT 4 (X1.5) - 2 Amp	LS contr. 1	ADR Signal	ADR Signal	ADR Signal	ADR Signal	ADR Signal	ADR Signal	ADR Signal

Preset	N°.	9	10	11	12	13	14	15	16
DIP6		OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
BCD	8		9	A	B	C	D	E	F
Description	NL - 2-Tone KLDP 2		I - Police	I - Ambulance	A - Fire-Brigades	A - Ambulance	A - Police	Pistensignal	GB - Fire-Brigades
Signal	NL 2-Tone		I - Police	I - Ambulance	A - Fire-Brigades	A - Ambulance	A - Police	Pistensignal	GB - Fire-Brigades
Night signal volume reduction related to day volume	25%		50%	50%	50%	50%	50%	50%	50%
Signal (DIP4)	preset (DIP4)		preset (DIP4)	preset (DIP4)	preset (DIP4)	preset (DIP4)	preset (DIP4)	preset (DIP4)	preset (DIP4)
IN/UT	IN1 (X1.13 + / X1.15 -)	Horn	Horn	Horn	Horn	Horn	Horn	Horn	Horn
	IN2 (X1.17)	Beacon on	Beacon on	Beacon on	Beacon on	Beacon on	Beacon on	Beacon on	Beacon on
	IN3 (X1.19)	Ignition on	-	-	Ignition on	Ignition on	Ignition on	-	-
	IN4 (X1.21)	Test	Test	Test	Test	Test	Test	Test	Test
	IN5 (X1.22)	Signal on	Signal on	Signal on	Signal on	Signal on	Signal on	Signal on	Signal on
	IN6 (X1.20)	Ext. Beacon indic.	backlight on	backlight on	backlight on	backlight on	backlight on	backlight on	backlight on
	IN7 (X1.18)	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night
	IN8 (X2.2)	PTT microphone	PTT microphone	PTT microphone	PTT microphone	PTT microphone	PTT microphone	PTT microphone	PTT microphone
	IN9 (X2.10)	radio on	radio on	radio on	radio on	radio on	radio on	radio on	radio on
OUTPUT	OUT 1 (X1.2) - 6 Amp	beacon	beacon	beacon	beacon	beacon	beacon	beacon	beacon
	OUT 2 (X1.1) - 6 Amp	beacon	beacon	beacon	beacon	beacon	beacon	beacon	beacon
IN/ OUT	IN / OUT 1 (X1.8) - 2 Amp	F3 (BT210)	F3 (BT210)	F3 (BT210)	F3 (BT210)	F3 (BT210)	F3 (BT210)	F3 (BT210)	F3 (BT210)
	IN / OUT 2 (X1.7) - 2 Amp	beacon contr. R	beacon contr. R	beacon contr. R	beacon contr. R	beacon contr. R	beacon contr. R	beacon contr. R	beacon contr. R
	IN / OUT 3 (X1.6) - 2 Amp	beacon contr. L	beacon contr. L	beacon contr. L	beacon contr. L	beacon contr. L	beacon contr. L	beacon contr. L	beacon contr. L
	IN / OUT 4 (X1.5) - 2 Amp	ADR Signal	ADR Signal	ADR Signal	ADR Signal	ADR Signal	ADR Signal	ADR Signal	ADR Signal

Preset	N°.	17	18	19	20	21	22	23	24
DIP6	ON	ON	ON	ON	ON	ON	ON	ON	ON
BCD	0	1	2	3	4	5	6	7	
Description	S	DIN ext. Beacon	DIN SE	DIN Berlin	N	US	CH	DIN BUS	
Signal	S	DIN	DIN	DIN	N	US	DIN	DIN	
Night signal volume reduction related to day volume	50%	50%	50%	< 1%	50%	50%	50%	50%	50%
Signal (DIP4)	presel (DIP4)	presel (DIP4)	presel (DIP4)	presel (DIP4)	presel (DIP4)	presel (DIP4)	presel (DIP4)	presel (DIP4)	
IN/UT	IN1 (X1.13 + / X1.15 -)	Horn	Horn	Horn	Horn	Horn	Horn	Horn	
	IN2 (X1.17)	Inter. farlight	Ext. Beacon-indicator	Beacon on	Beacon on	Beacon on	Beacon on	Beacon on	indicator 3. Beacon
	IN3 (X1.19)	Signal on	Ignition on	Ignition on	Ignition on	Test	Test	Test	ISG mounted
	IN4 (X1.21)	Beacon rear	Test	Test	Test	PEAK enable	YELP	YELP	-
	IN5 (X1.22)	Antihatesequenz	YELP	YELP	Signal on	YELP	YELP	YELP	YELP
	IN6 (X1.20)	Beacon vorn	S/L (backlight on)	S/L (or backlight on if BT1210)	backlight on	HIL0	S/L (or backlight on if BT1210)	S/L (or backlight on if BT1210)	-
	IN7 (X1.18)	Beacon on	Day/Night	Day/Night	Day/Night	WALL	Day/Night	Day/Night	HLFB indic.
	IN8 (X2.2)	PTT microphone	PTT microphone	PTT microphone	PTT microphone	PTT microphone	PTT microphone	PTT microphone	PTT microphone
	IN9 (X2.10)	radio on	radio on	radio on	radio on	radio on	radio on	radio on	radio on
OUTPUT	OUT 1 (X1.1) - 6 Amp	beacon front	Add. beacon	beacon	beacon	beacon	beacon	beacon	beacon
OUTPUT	OUT 2 (X1.2) - 6 Amp	beacon rear	frontflash	beacon	beacon	beacon	beacon	beacon	beacon
IN/OUT	IN / OUT 1 (X1.8) - 2 Amp	FB Blue	F3	SE PTT	SE PTT	F3 (BT1210)	F3 (BT1210)	F3 (BT1210)	Heulmax ¹
	IN / OUT 2 (X1.7) - 2 Amp	FB Red	beacon contr. R	F3 (BT1210)	beacon contr. R	beacon contr. R	beacon contr. R	F2 (BT1210)	F1
	IN / OUT 3 (X1.6) - 2 Amp	Int. Fernlicht	beacon contr. L	beacon contr. L	beacon contr. L	beacon contr. L	beacon contr. L	beacon contr. L	HLFB
	IN / OUT 4 (X1.5) - 2 Amp	STOP Msg	ADR Signal	ADR Signal	ADR Signal	ADR Signal	ADR Signal	ADR Signal	SLB

Preset	N°.	25	26	27	28	29	30	31	32
DIP6	ON	ON	ON	ON	ON	ON	ON	ON	ON
BCD	8	9	A	B	C	D	E	F	
Description	DIN Grille	FIN - Police	FIN - Border Protection	NL - 2-Tone KLDP 3	DIN - Compressorsignal with Frontflash	DIN - Compressorsignal	DIN - Test / YELP	DIN - Berlin VZ	
Signal	DIN	FIN	FIN	NL 2-Tone	DIN	DIN	DIN	DIN	
Night signal volume reduction related to day volume	50%	50%	50%	25%	50%	50%	50%	< 1%	
Signal (DIP4)	presel (DIP4)	presel (DIP4)	presel (DIP4)	presel (DIP4)	presel (DIP4)	presel (DIP4)	presel (DIP4)	presel (DIP4)	
IN/UT	IN1 (X1.13 + / X1.15 -)	Horn	Horn	Horn	Horn / activation of signal	Horn / activation of signal	Horn / activation of signal	Horn / activation of signal	
	IN2 (X1.17)	Beacon on	Beacon on	Beacon on	Beacon on	Beacon on	Beacon on	Beacon on	
	IN3 (X1.19)	Ignition on	Ignition on	Ignition on	Ignition on	Ignition on	Ignition on	Ignition on	
	IN4 (X1.21)	Test	Test	Test	Test	Test	Test	Test	
	IN5 (X1.22)	AIRHORN	Signal on	Signal on	YELP	YELP	YELP enable	YELP	
	IN6 (X1.20)	S/L (or backlight on if BT1210)	backlight on	backlight on	S/L (or backlight on if BT1210)	S/L (or backlight on if BT1210)	S/L (or backlight on if BT1210)	S/L (or backlight on if BT1210)	
	IN7 (X1.18)	Day/Night	Day/Night	Day/Night	compressor Sig.	compressor Sig.	Day/Night	Day/Night	
	IN8 (X2.2)	PTT microphone	PTT microphone	PTT microphone	PTT microphone	PTT microphone	PTT microphone	PTT microphone	
	IN9 (X2.10)	radio on	radio on	radio on	radio on	radio on	radio on	radio on	
OUTPUT	OUT 1 (X1.2) - 6 Amp	beacon	beacon	beacon	beacon	beacon	beacon	beacon	
OUTPUT	OUT 2 (X1.1) - 6 Amp	beacon	beacon	beacon	frontflash	beacon	beacon	beacon	
IN/OUT	IN / OUT 1 (X1.8) - 2 Amp	F3 (BT1210)	F3 (BT1210)	F3 (BT1210)	F3 (BT1210)	F3 (BT1210)	F3 (BT1210)	F3 (BT1210)	
	IN / OUT 2 (X1.7) - 2 Amp	beacon contr. R	F2 (BT1210)	F2 (BT1210)	beacon contr. R	beacon contr. R	beacon contr. R	beacon contr. R	
	IN / OUT 3 (X1.6) - 2 Amp	beacon contr. L	frontflash	frontflash	HLFB	beacon contr. L	beacon contr. L	beacon contr. L	
	IN / OUT 4 (X1.5) - 2 Amp	ADR Signal	ADR Signal	ADR Signal	SLB	ADR Signal	ADR Signal	ADR Signal	

Lexicon:

S/L	Stadt/Land – German City/Country ton
PEAK	US-Ton
Horn Input	Vehicle Horn or Klaxon input to control (Start/Stop) Siren Ton
SLB	Output for Search Light Beam
Beacon contr. R	Beacon control Right Output
Beacon contr. L	Beacon control Left Output
FB Blue	Front light blue
FB Red	Front light Red
STOP Msg	ON/OFF for STOP LED- Message Panel
Grille	AIRHORN-Signal

2.4 Key assignment with BT-210



Assignment of keys by using BT-210

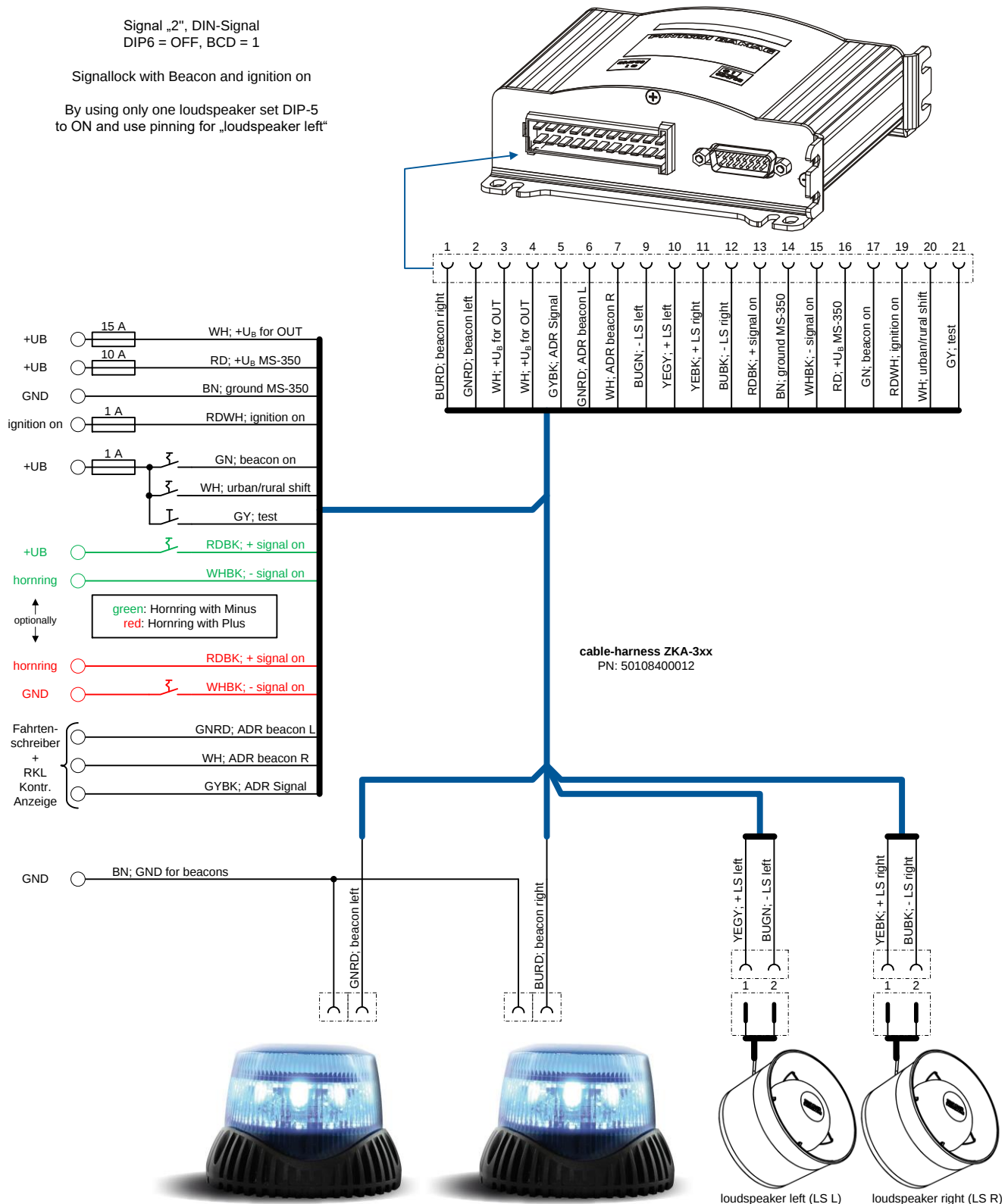
Nr.	DIP6	BCD	Description	beacon-key	Hornring key	signal key	key F1	key F2	key F3
1	OFF	0	Test	beacon on	hornring	signal on	AF bus	AF radio	F3
2	OFF	1	DIN	beacon on	hornring	signal on	AF microphone	AF radio	F3
3	OFF	2	F - Ambulance	beacon on	hornring	signal on	AF bus	AF radio	F3
4	OFF	3	F - Fire-Brigades	beacon on	hornring	signal on	AF bus	AF radio	F3
5	OFF	4	F - Police	beacon on	hornring	signal on	AF bus	AF radio	F3
6	OFF	5	F - UMH	beacon on	hornring	signal on	AF bus	AF radio	F3
7	OFF	6	F - Gendarmerie	beacon on	hornring	signal on	AF bus	AF radio	F3
8	OFF	7	NL -2-Tone KLPD1	beacon on	hornring	signal on	frontflash	F2	Nightshift
9	OFF	8	NL -2-Tone KLPD2	beacon on	hornring	signal on	F1	F2	F3
10	OFF	9	I - Police	beacon on	hornring	signal on	AF bus	AF radio	F3
11	OFF	A	I - Ambulance	beacon on	hornring	signal on	AF bus	AF radio	F3
12	OFF	B	A - Fire-Brigades	beacon on	hornring	signal on	AF bus	AF radio	F3
13	OFF	C	A - Ambulance	beacon on	hornring	signal on	AF bus	AF radio	F3
14	OFF	D	A - Police	beacon on	hornring	signal on	AF bus	AF radio	F3
15	OFF	E	Pistensignal	beacon on	hornring	signal on	AF bus	AF radio	F3
16	OFF	F	GB - Fire-Brigades	beacon on	hornring	signal on	AF bus	AF radio	F3
17	ON	0	S	beacon on	hornring	signal on	AF bus	AF radio	F3
18	ON	1	DIN ext. beacon	beacon on	hornring	signal on	frontflash	AF radio	F3
19	ON	2	DIN SE	beacon on	hornring	signal on	AF microphone	AF radio	F3
20	ON	3	DIN Berlin	beacon on	hornring	signal on	AF bus	AF radio	Nightshift
21	ON	4	N	beacon on	hornring	signal on	AF bus	AF radio	F3
22	ON	5	US	beacon on	PEAK	AIRHORN	HiLo	WAIL	YELP
23	ON	6	CH	beacon on	hornring	signal on	frontflash	F2	F3
24	ON	7	DIN bus	beacon on	hornring	signal on	AF bus	AF radio	YELP
25	ON	8	DIN Grille	beacon on	hornring	signal on	AF bus	AF radio	F3
26	ON	9	FIN - Police	beacon on	hornring	signal on	frontflash	AF radio	F3
27	ON	A	FIN - Border Prot.	beacon on	hornring	signal on	frontflash	AF radio	F3
28	ON	B	NL -2-Tone KLPD3	beacon on	hornring	signal on	AF bus	AF radio	YELP
29	ON	C	DIN - Compr.Sig.FB	beacon on	hornring	signal on	frontflash	compr.Sig.	YELP
30	ON	D	DIN - Compr.Sig.	beacon on	hornring	signal on	AF bus	compr.Sig.	F3
31	ON	E	DIN - Test / YELP	beacon on	hornring	signal on	AF bus	AF radio	F3
32	ON	F	DIN - Berlin V2	beacon on	hornring	signal on	AF bus	AF radio	F3

3.1 connection sample with separate switches

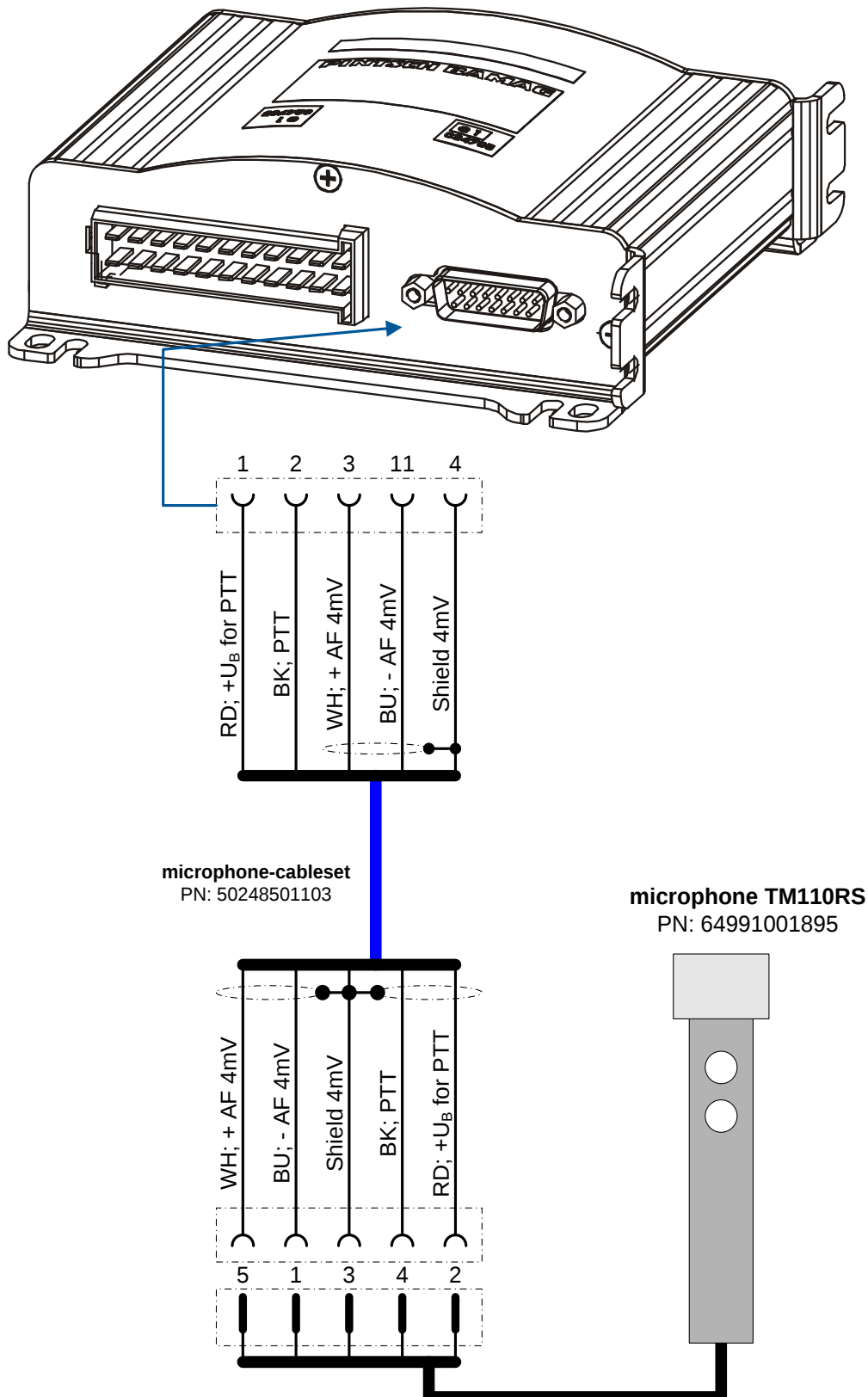
Signal „2”, DIN-Signal
 DIP6 = OFF, BCD = 1

Signallock with Beacon and ignition on

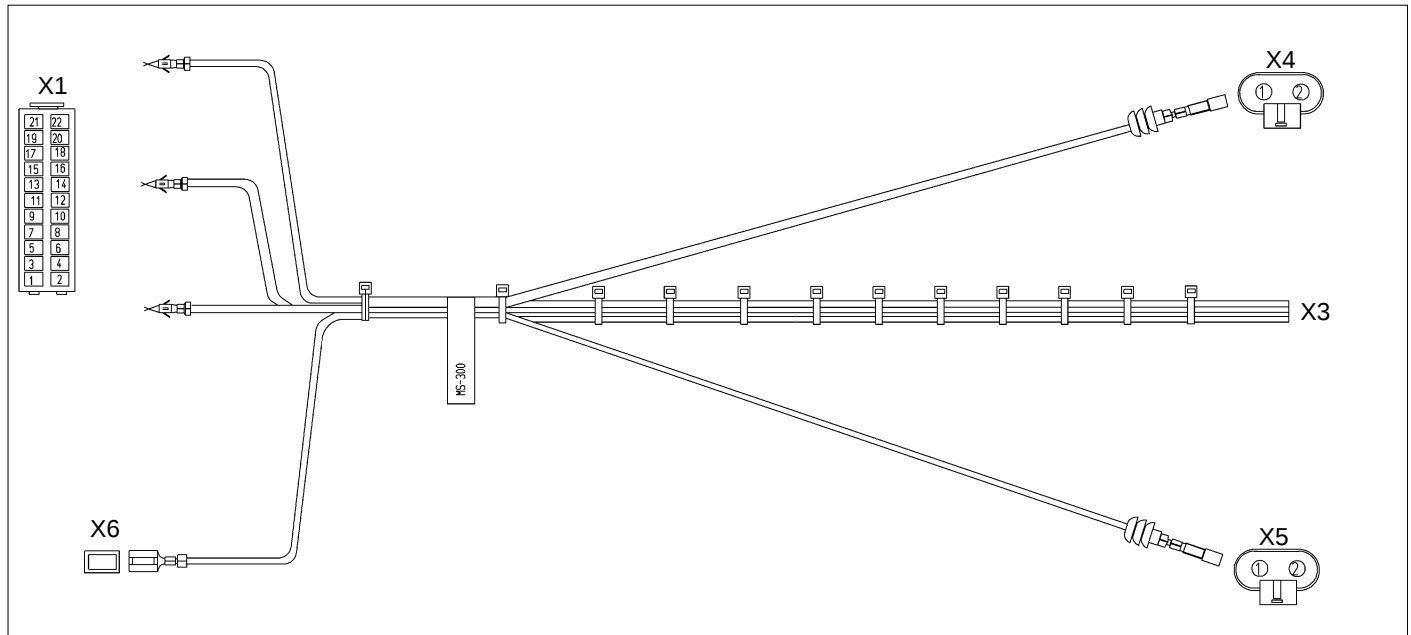
By using only one loudspeaker set DIP-5 to ON and use pinning for „loudspeaker left”



3.3 connection sample microphone



4.1 ZKA-3xx - cable-harness 50108400012



X1 – AMP; 22pin

Pin	colour	mm ²	function
1	???/RED	2	beacon right
2	GREEN/RED	3	beacon left
3	WHITE	3	+U _B beacon (+UB)
4	WHITE	3	+U _B beacon (+UB)
5	GREY/BLACK	1	ADR signal
6	GREEN/RED	1	ADR beacon
7	WHITE	1	Pin 7 (IN / OUT 2)
8	WHITE	1	Pin 8 (IN / OUT 1)
9	???/GREEN	2	loudspeaker left -
10	YELLOW/GREY	2	loudspeaker left +
11	YELLOW/BLACK	2	loudspeaker right +
12	???/BLACK	2	loudspeaker right -
13	RED/BLACK	1	+ signal on
14	BROWN	3	GND MS-350 (Kl. 31)
15	WHITE/BLACK	1	- signal on
16	RED	3	+U _B MS-350 (Kl. 30)
17	GREEN	1	beacon on
18	WHITE	1	PIN 18 (IN 7)
19	RED/WHITE	1	ignition on (Kl. 15)
20	WHITE	1	urban/rural shift
21	GREY	1	Test
22	WHITE	1	YELP

X6 – plug 6,3mm; 1pin

Pin	colour	mm ²	function
1	BROWN	1	GND MS-350 (Kl. 31)

X3 – open wires

Pin	colour	mm ²	function
1	???/RED	2	beacon right
2	GREEN/RED	3	beacon left or 3. beacon
3	WHITE	3	+U _B RKL (Kl. 30)
4	GREY/BLACK	1	ADR signal
5	GREEN/RED	1	ADR beacon
6	WHITE	1	Pin 7 (IN / OUT 2)
7	WHITE	1	Pin 8 (IN / OUT 1)
8	RED/BLACK	1	+ signal on
9	BROWN	3	GND MS-350 (Kl. 31)
10	WHITE/BLACK	1	- signal on
11	RED	3	+U _B MS-350 (Kl. 30)
12	GREEN	1	beacon on
13	WHITE	1	PIN 18 (IN 7)
14	RED/WHITE	1	ignition on (Kl. 15)
15	WHITE	1	urban/rural shift
16	GREY	1	Test
17	WHITE	1	YELP

X4 – Superseal; 2pin

Pin	colour	mm ²	function
1	YELLOW/BLACK	2	loudspeaker right +
2	???/BLACK	2	loudspeaker right -

X5 – Superseal; 2pin

Pin	colour	mm ²	function
1	YELLOW/GREY	2	loudspeaker left +
2	???/GREEN	2	loudspeaker left -

5. technical data

TECHNICAL DATA MS-350	
nominal voltage	12 / 24 V _{DC}
operating voltage	10.8 ... 14.4 V _{DC} / 21.6 ... 28.8 V _{DC}
limit voltage	-32 ... +32 V _{DC}
current consumption: - in standby mode - maximum	< 500 µA max. 5 A (without beacon)
ambient temperature: - in operation - storage / transport	-25 °C ... +70 °C -40 °C ... +85 °C
output power	12V: 2 x 50 W (120 W max) 24V: 2 x 80 W (200 W max)
dimensions	44.6 mm x 136.6 mm x 131 mm
weight	approx. 400 g
protection class	IP 54
inputs	9 x <20 mA; programmable, High-Side 1 x <20 mA; programmable, Low-Side
outputs	2 x <6 A; programmable 1 x <2 A; programmable, also usable as input
approvals: - acoustic - EMC	W 25050 E1 047152

TECHNICAL DATA K-SR 350	
impedance	4 Ω (12V) / 16 Ω (24V)
power rating	60 W (80 W Peak)
ambient temperature: - in operating mode - storage / transport	-25 °C ... +60 °C -40 °C ... +80 °C
dimensions	Ø 109.25 mm x 68 mm
weight	approx. 850 g
protection class	IP 54
colour	black

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