

# Spare Parts Catalogue





#### **Table of Contents**

1	Transmitter - housings	03
2	Transmitter - accessories	10
3	Transmitter - carrying options	19
4	Transmitter - operating elements	22
5	Transmitter - batteries and accessories	31
6	Battery chargers and accessories	33
7	Receiver - accessories and antennas	35
8	Printed circuit boards and RF-modules	38
9	Relays and fuses	40
10	Cables, plugs, miscellaneous	42

#### status quo: 01/19/09

#### Manufacturer:

HBC-radiomatic GmbH Haller Strasse 47-53 74564 Crailsheim Germany

Phone +49 7951 393-0 Fax +49 7951 393-50

info@radiomatic.com www.hbc-radiomatic.com

Spare-part-dept.:

Phone +49 7951 393-796 or -797

Fax +49 7951 393-802

® radiomatic und radiobus sind eingetragene deutsche Warenzeichen.

 $^{\mbox{\scriptsize TM}}$  radiomatic and radiobus are registered German trademarks.

© 01/2009, HBC-radiomatic GmbH, 74564 Crailsheim, Germany

Die HBC-radiomatic GmbH behält sich das Recht vor, o. a. Informationen jederzeit zu ändern oder zu ergänzen.

Keine Haftung für Druckfehler und Irrtümer! Technische Änderungen vorbehalten.

Jegliche Vervielfältigung dieses Dokuments oder von Teilen dieses Dokuments ohne vorherige schriftliche Erlaubnis durch die HBC-radiomatic GmbH sind untersagt.

HBC-radiomatic GmbH is not liable for any misprints or errors! All rights reserved.

No part of the present document may be reproduced in any manner whatsoever without the expressed written permission of HBC-radiomatic GmbH.





## 1. Transmitter - housings

# **Battery holder for transmitter** contact block and downholder Art.-Nr. 106-04-00010



Battery holder for transmitter

contact block only Art.-Nr. 106-04-00007



Battery holder for transmitter

battery holder only Art.-Nr. 003-90-00031



#### Battery holder for transmitter

with tele-teach contacts, contact block

Art.-Nr. 106-04-00003



Plastic lower part for radiomatic®

VISIO

Art.-Nr. 106-90-00109



### Plastic upper part for radiomatic® visio

VISIO

for 2x radiomatic® iCON, with flute, 2 LEDs and display window Art.-Nr. 190-03-00002



## Plastic upper part for radiomatic® visio

for 1x radiomatic® iCON, with flute, 2 LEDs and display window  $\,$ 

Art.-Nr. 190-03-00001



#### Protective kit cubix

colour: blu

Art.-Nr. AP000160



#### Transmitter housing lower part

with battery compartment, colour: black Art.-Nr. 303-01-00002

Please specify the fabrication number!



## Transmitter housing lower part cubix Blue Edition

colour: orange

Art.-Nr. HTC21030







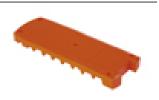


### 1. Transmitter - housings

### Transmitter housing lower part

colour: orange Art.-Nr. HTC11031

Please specify the fabrication number!



## Transmitter housing lower part eco and linus 6 (eco L)

with battery compartment, colour: orange

Art.-Nr. 310-01-00005



# Transmitter housing lower part eco and linus 6 (eco L)

with battery compartment, key switch, STOP impact switch and 6-pin plug, colour: orange

Art.-Nr. HTE15130



## Transmitter housing lower part micron 2

with battery compartment, colour:

orange

Art.-Nr. 305-01-00002

Please specify the fabrication number!



## Transmitter housing lower part micron 4

with battery compartment for BA222060, colour: orange

Art.-Nr. 307-01-00007



### Transmitter housing lower part

with battery compartment and viewport for radiomatic® infrakey,

colour: orange

Art.-Nr. HTM59530



## Transmitter housing lower part micron 4/5

with battery compartment for FuB 9NM, colour: orange

Art.-Nr. HTM59330



## Transmitter housing lower part micron 4/6

with battery compartment for

BA2230\_0, colour: orange

Art.-Nr. HTM63230



### Transmitter housing lower part micron 5

with battery compartment for BA222060, colour: orange

Art.-Nr. 308-01-00010



#### Transmitter housing lower part orbit

with battery compartment, for industry (TX641/TX681), colour: orange

Art.-Nr. HTO13230









### 1. Transmitter - housings

#### Transmitter housing lower part orbit

with battery compartment, for winches, colour: orange

Art.-Nr. HTO13330

Please specify the fabrication number!



#### Transmitter housing lower part orbit

with battery compartment, for industry (TX671/TX680), colour: orange

Art.-Nr. HTO13130

Please specify the fabrication number!



#### Transmitter housing lower part quadrix

with STOP slider and cable harness, colour: orange/blue

Art.-Nr. HTQ13130



#### Transmitter housing lower part spectrum 1

with battery compartment, tinned cable, colour: orange

Art.-Nr. 311-01-00005



## Transmitter housing lower part

with battery compartment, key switch, STOP impact switch and wiring, colour:

Art.-Nr. HTS1B130

Please specify the fabrication number!



## Transmitter housing lower part

with battery compartment for BA225030, tinned cable, colour:

Art.-Nr. 312-01-00013



#### Transmitter housing lower part spectrum 2

with battery compartment for BA214060, tinned cable, colour:

orange Art.-Nr. 312-01-00014



#### Transmitter housing lower part spectrum 2

with battery compartment, key switch, STOP impact switch and wiring, colour:

Art.-Nr. HTS2B130

Please specify the fabrication number!



#### Transmitter housing lower part spectrum 3

with battery compartment, tinned cable, colour: orange

Art.-Nr. HTS3A130



## Transmitter housing lower part

with battery compartment, key switch, STOP impact switch and wiring, colour: orange

Art.-Nr. HTS3B130







### 1. Transmitter - housings

## Transmitter housing upper part cubix Blue Edition x 6

drilled without front plate, colour:

Art.-Nr. HTC20130

Please specify the fabrication number!



## Transmitter housing upper part cubix Blue Edition x 8

drilled without front plate, colour:

Art.-Nr. HTC20230

Please specify the fabrication number!



## Transmitter housing upper part cubix x 6

drilled without front plate, colour:

orange

Art.-Nr. HTC10131

Please specify the fabrication number!



## Transmitter housing upper part cubix x 8

drilled without front plate, colour:

orange

Art.-Nr. HTC10231

Please specify the fabrication number!



## Transmitter housing upper part eco with roll over bar

drilled, with front plate after existing layout, colour: orange

threaded bolts and protective collar for short-lift key

Art.-Nr. 310-01-00015

Please specify the fabrication number!



## Transmitter housing upper part eco with roll over bar

drilled, with front plate 31.214a,

colour: orange

threaded bolts and protective collar for short-lift key

Art.-Nr. 310-01-00007



## Transmitter housing upper part eco with roll over bar

drilled, with **front plate 31.205a**, colour: orange

threaded bolts and protective collar for short-lift key

Art.-Nr. HTE10130



## Transmitter housing upper part eco with roll over bar

drilled, with front plate 31.249a,

colour: orange

threaded bolts and protective collar for

short-lift key

Art.-Nr. HTE10230



# Transmitter housing upper part linus 6 (eco L)

drilled for 6 linear joysticks and 2 rotary switches, with roll-over bar, colour: orange

Art.-Nr. HTL60130

Please specify the fabrication number!



# Transmitter housing upper part linus 6 (eco L)

drilled for 6 linear joysticks, 1 rotary switch and 1 toggle switch, with roll-over bar, colour: orange

Art.-Nr. HTL60230







## 1. Transmitter - housings

### Transmitter housing upper part micron 2

drilled, colour: orange Art.-Nr. 305-01-00001

Please specify the fabrication number!



## Transmitter housing upper part micron 3/5

drilled for 10 push buttons and key switch, colour: orange Art.-Nr. HTM50330



## Transmitter housing upper part micron 4

drilled for key switch, colour: orange Art.-Nr. HTM40230



## Transmitter housing upper part micron 4

drilled for radiomatic® iON, colour: orange

Art.-Nr. HTM40230



## Transmitter housing upper part micron 5

drilled for key switch, 9 push buttons and 1 rotary switch, colour: orange

Art.-Nr. HTM50230



### Transmitter housing upper part

drilled for 10 push buttons, without hole for key switch, colour: orange

Art.-Nr. HTM50130



## Transmitter housing upper part micron 5

drilled for 9 push buttons and 1 rotary switch, without hole for key switch,

colour: orange

Art.-Nr. HTM50030



## Transmitter housing upper part micron 5

drilled for radiomatic® iON, 9 push buttons and 1 rotary switch,

colour: orange

Art.-Nr. HTM51230



## Transmitter housing upper part micron 5

drilled for radiomatic® iON and 10 push buttons, colour: orange

Art.-Nr. HTM51330



## Transmitter housing upper part micron 6

with display, colour: orange Art.-Nr. HTM60130







### 1. Transmitter - housings

#### Transmitter housing upper part orbit

drilled for industry, colour: orange

Art.-Nr. HTO10130

Please specify the fabrication number!



#### Transmitter housing upper part orbit

drilled for winches, colour: orange

Art.-Nr. HTO10230

Please specify the fabrication number!



#### Transmitter housing upper part orbit

drilled for rotary switch, colour: orange

Art.-Nr. HTO10330

Please specify the fabrication number!



### Transmitter housing upper part patrol

drilled, without front plate, with belt clip,

colour: orange

Art.-Nr. 303-00-00002

Please specify the fabrication number!



## Transmitter housing upper part quadrix

with light conductor and stickers for

quadrix

colour: orange

Art.-Nr. 190-03-00003



## Transmitter housing upper part spectrum 1

drilled, colour: orange

Art.-Nr. 311-01-00018

Please specify the fabrication number!



## Transmitter housing upper part spectrum 1

drilled, with front plate 31.200a,

colour: orange

Art.-Nr. 311-01-00001



## Transmitter housing upper part spectrum 2

drilled, colour: orange

Art.-Nr. 312-01-00007

Please specify the fabrication number!



## Transmitter housing upper part spectrum 3

drilled, colour: orange

Art.-Nr. 313-01-00001

Please specify the fabrication number!



#### Transmitter housing vector

base part with housing cover rear,

colour: orange

Art.-Nr. 302-01-00001







# 1. Transmitter - housings

Transmitter housing lower part micron 3

with battery compartment, colour: orange

Art.-Nr. 306-01-00010







### 2. Transmitter - accessories

### Adhesive stickers crane direction, (1

1 set = 2 pieces, d = 248 mm, colour: yellow/black Art.-Nr. 005-01-00413



### Adhesive stickers double arrows, (1 set)

1 set = 4 pieces, coloured Art.-Nr. FSST0012



#### Adhesive stickers double arrows, DIN A4 (1 set)

1 set = 4 pieces, coloured Art.-Nr. FSST0013









Art.-Nr. FSST0001









## Adhesive stickers SEB, DIN A6

1 set = 4 pieces, coloured Art.-Nr. FSST0011







#### Aluminium front plate construction crane standard

various sizes and inscriptions Art.-Nr. diverse Please specify the fabrication number!



#### Aluminium tube for roll-over bar (SHB 190)

with eyelets for the snap hook, length:

Art.-Nr. 106-90-00001



#### Aluminium tube for roll-over bar (SHB 190)

without eyelets, length: 192 mm Art.-Nr. 002-90-00121



#### Aluminium tube for roll-over bar (SHB 230)

without eyelets, length: 231 mm Art.-Nr. 002-90-00116



#### Aluminium tube for roll-over bar (SHB 230)

with eyelets for the snap hook, length: 229 mm

Art.-Nr. 106-90-00002









### 2. Transmitter - accessories

Aluminium tube for roll-over bar

with eyelets for the snap hook, length: 292 mm

Art.-Nr. 106-90-00003



Aluminium tube for roll-over bar

without eyelets, length: 292 mm

Art.-Nr. 002-90-00119



Aluminium tube for rolling roll-over

(SHB 190 Z)

with eyelets for the snap hook, length:

205 mm

Art.-Nr. 106-90-00014



Aluminium tube for rolling roll-over

(SHB 230 Z)

with eyelets for the snap hook, length:

243 mm

Art.-Nr. 106-90-00015



Aluminium tube for rolling roll-over

(SHB 230 Z)

without eyelets, length: 243 mm

Art.-Nr. 002-90-00162



Aluminium tube for rolling roll-over

(SHB 290 Z)

with eyelets for the snap hook, length:

302 mm

Art.-Nr. 106-90-00016



Aluminium tube for rolling roll-over (SHB 290 Z)

without eyelets, length: 302 mm

Art.-Nr. 002-90-00164



Aluminium tube for rolling roll-over

(SHB 190 Z)

without eyelets, length: 205 mm

Art.-Nr. 002-90-00160



Assembly kit for roll-over bar

for spectrum 1 (SHB 190)

Art.-Nr. 190-01-00002



Assembly kit for roll-over bar

for spectrum 2/3 (SHB 230 or 290)

Art.-Nr. 190-01-00003







### 2. Transmitter - accessories

#### Assembly kit for roll-over bar

for spectrum 2/3 (SHB 230-Z or 290-Z)

Art.-Nr. 190-01-00050



#### Assembly kit for roll-over bar

for spectrum 1 (SHB 190-Z)

Art.-Nr. 190-01-00049



#### Contact element battery compartment

Art.-Nr. 002-90-00209



#### External transmitter antenna BNC

with water protection cap, frequency range: 420-440 MHz

Art.-Nr. AA020003



#### External transmitter antenna SMA

with rubber seal, frequency range: 430-440 MHz

Art.-Nr. AA030003



#### Holding frame for RF data radio transmitter, micron 4/5

plastic

Art.-Nr. 003-90-00003



#### Housing antenna for transmitter

SMB-socket, one side open, length:

189 mm

Art.-Nr. AA040002



#### Housing antenna for transmitter

MMCX plug, one side open, length:

163 mm

Art.-Nr. AA080004

Please specify the fabrication number!



#### Insertion plate blank for spectrum and eco

colour: black

Art.-Nr. 005-01-00335



#### Insertion plate for eco and spectrum

with standard inscription, colour: black/white, metal

Art.-Nr. 005-99-00003









#### 2. Transmitter - accessories

Plastic adhesive sticker for micron 6

black/white

Art.-Nr. 005-01-00452



Plastic adhesive sticker sheet for

6-colour with 50 standard symbols Art.-Nr. 005-01-00295



Plastic adhesive sticker sheet for micron 3/5

black/white with 50 special symbols

Art.-Nr. 005-01-00361



Plastic adhesive sticker sheet for micron 4

6-colour with 50 standard symbols

Art.-Nr. 005-01-00273



Plastic adhesive sticker sheet for micron 4

black/white with 50 special symbols

Art.-Nr. 005-01-00274



Plastic adhesive sticker sheet for

black/white with 50 stickers Art.-Nr. 005-01-00275



Plastic adhesive sticker sheet for micron 6

6-colour with 50 standard symbols Art.-Nr. 005-01-00575



Plastic adhesive sticker sheet for micron 6

black/white with 50 special symbols Art.-Nr. 005-01-00445



Plastic adhesive sticker sheet for quadrix

black/white with 50 stickers Art.-Nr. 005-01-00550



Plastic adhesive sticker sheet for quadrix

6-colour with 50 standard symbols Art.-Nr. 005-01-00465







#### 2. Transmitter - accessories

### Plastic adhesive sticker sheet for spectrum/eco

black/white with 21 special symbols Art.-Nr. 005-01-00609



## Plastic adhesive sticker sheet for spectrum/eco

black/white with blank label Art.-Nr. 005-01-00610



## Plastic adhesive sticker sheet for spectrum/eco

black/white with 21 special symbols Art.-Nr. 005-01-00607



#### Plastic adhesive sticker sheet for spectrum/eco

black/white with 21 special symbols Art.-Nr. 005-01-00608



## Plastic adhesive sticker sheet for spectrum/eco

black/white with 21 stickers Art.-Nr. 005-01-00606



## Plastic adhesive sticker sheet for spectrum/eco

black/white with 21 special symbols Art.-Nr. 005-01-00605



## Plastic adhesive sticker sheet for spectrum/eco

black/white with 21 standard symbols Art.-Nr. 005-01-00604



## Plastic adhesive sticker sheet for spectrum/eco

6-colour with 21 standard symbols Art.-Nr. 005-01-00603



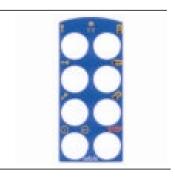
## Plastic adhesive sticker shield for cubix Blue Edition 6 x

with double arrows, colour: blue Art.-Nr. 005-01-00533



## Plastic adhesive sticker shield for cubix Blue Edition 8 x

with double arrows, colour: blue Art.-Nr. 005-01-00534







#### 2. Transmitter - accessories

Plastic adhesive sticker shield for cubix 6 x

with double arrows, colour: black Art.-Nr. FPST0005



Plastic adhesive sticker shield for cubix 8 x with double arrows, colour: black

with double arrows, colour: black Art.-Nr. FPST0006



Plastic adhesive sticker shield for micron 3/5

with HBC-logo and battery symbol Art.-Nr. FSST0009



Plastic adhesive sticker shield for micron 3/5

with key switch symbol Art.-Nr. FSST0010



Plastic adhesive sticker shield for micron 3/5

blank

Art.-Nr. 005-01-00304



Plastic adhesive sticker shield for micron 3/5

inscription: Start-Stop Art.-Nr. 005-01-00421 START STOP

Plastic adhesive sticker shield for micron 4

with battery symbol Art.-Nr. 005-01-00623



Plastic adhesive sticker shield for micron 5

with radiomatic® iON

with HBC-logo and battery symbol Art.-Nr. 005-01-00529



Plastic adhesive stickerfor quadrix

Art.-Nr. 005-01-00485



Plastic frames for linus 4 rubber bellow

Art.-Nr. 003-90-00152









### 2. Transmitter - accessories

Plastic frames for linus 6 rubber bellow

Art.-Nr. 003-90-00153



Plastic light conductor for micron 3/5

transparent, 8 x 10 x 8 mm Art.-Nr. 003-90-00050



Plastic light conductor for micron 4

transparent, 6 x 16 mm Art.-Nr. 003-90-00051



Plastic light conductor for micron 4/5

with radiomatic® iON, transparent Art.-Nr. 003-90-00463



Protective collar for Short-lift push button

labelled with punch blank Art.-Nr. 106-90-00055



Protective kit for STOP impact switch

for vector and micron 2, colour: blue, rectangular

Art.-Nr. 003-90-00137



Protective kit for STOP impact switch micron 3/5

plastic, colour: black Art.-Nr. 106-90-00073



Roll-over bar eco

Art.-Nr. AP000300



Roll-over bar linus 4

complete

Art.-Nr. AP001860



Roll-over bar linus 6 (eco L)

complete

Art.-Nr. AP000760





## 2. Transmitter - accessories

Roll-over bar spectrum 1 (SHB 190)

size: 190 mm Art.-Nr. AP000400



Roll-over bar spectrum 1 with rolling side part (SHB 190-Z)

size: 190 mm Art.-Nr. AP000800



Roll-over bar spectrum 2 (SHB 230)

size: 230 mm Art.-Nr. AP000500



Roll-over bar spectrum 2 with rolling side part (SHB 230-Z)

size: 230 mm Art.-Nr. AP000900



Roll-over bar spectrum 3 (SHB 290)

size: 290 mm Art.-Nr. AP000600



Roll-over bar spectrum 3 with rolling side part (SHB 290-Z)

size: 290 mm Art.-Nr. AP001000



Side part for roll-over bar linus 4/6 (eco L)

left side, colour: blue Art.-Nr. 003-90-00034



Side part for roll-over bar linus 4/6 (eco L)

right side, colour: blue Art.-Nr. 003-90-00035



Side part for roll-over bar spectrum

colour: black

Art.-Nr. 003-90-00070



Side part for roll-over bar spectrum

right side, colour: black Art.-Nr. 003-90-00002







### 2. Transmitter - accessories

#### Side part for roll-over bar spectrum

left side, colour: black Art.-Nr. 003-90-00001



#### Type plate for receiver

plastic, labeled

Art.-Nr. 005-99-00004

Please specify the fabrication number!



#### Type plate for transmitter

plastic, labeled Art.-Nr. 005-99-00005







## 3. Transmitter - carrying options

#### Belt clip for transmitter

orbit, micron 4, vector, quadrix or cubix Art.-Nr. AS000200



#### Belt lock for waist carrying belt

Art.-Nr. 190-01-00025



#### Carrying bag cubix

colour: black with cubix-logo Art.-Nr. AS001000



#### Carrying bag micron 3/5

with belt, colour: black Art.-Nr. AS003200



#### Carrying bag orbit

colour: black Art.-Nr. AS001100



#### Carrying bag quadrix

colour: black Art.-Nr. AS004300



#### Carrying belt for micron and patrol

side-carrying, leather, length: 1,30 m

Art.-Nr. AS001500



#### Carrying clip micron 3/5

with button and holding rivet

Art.-Nr. AS000600



#### Carrying holder vector, orbit and cubix

plastic, colour: blue

Art.-Nr. AS002060



#### Leather bag micron 1

in quiver form with belt strap, size: 205 x 70 x 56 mm

Art.-Nr. AS002700



Page 19





## 3. Transmitter - carrying options

Leather bag micron 3/5 in quiver form with belt strap, size: 205 x 65 x 65 mm Art.-Nr. AS001900



**Protective kit caps micron 3/5** with elastic bands, colour: blue Art.-Nr. AP011060



**Protective kit caps micron 3/5** with elastic bands, colour: yellow Art.-Nr. AP011040



**Protective kit caps micron 3/5** with elastic bands, colour: black Art.-Nr. AP011000



**Protective kit micron 4** with elastic bands, colour: blue Art.-Nr. AP000260



Protective kit micron 4 with elastic bands, colour: black Art.-Nr. AP000200



**Rivets for waist carrying set** for securing the snap hook Art.-Nr. 003-05-00044



**Shoulder and neck belt** with 2 side snap hooks Art.-Nr. AS003400



Snap hook for waist carrying set and shoulder strap

left side

Art.-Nr. 003-05-00030



Snap hook for waist carrying set and shoulder strap

right side

Art.-Nr. 003-05-00031







# 3. Transmitter - carrying options

#### Suspenders belt (1 pair)

with eye screws Art.-Nr. AS003500



#### Waist carrying belt

with inscription: HBC-radiomatic Art.-Nr. AS000800



#### Y-suspenders

additional for hip belt AS000800, with 3

Art.-Nr. AS003100







## 4. Transmitter - operating elements

#### Activating button for linear lever

colour: red

Art.-Nr. 101-90-00120



#### Activating button for linear lever

colour: black

Art.-Nr. 101-90-00119



## Adapter piece for STOP impact switch micron 3/5

from plastic with micro-cellular rubber

seal

Art.-Nr. 101-90-00053



#### Bellows for DJET push button

with ring and push button cap Art.-Nr. 101-90-00113



#### Bellows for joystick Akerström

with screws, size: 53 x 53 mm

Art.-Nr. 101-90-00111



#### Bellows for joystick Euchner

Typ: SK-321, d = 30 mm

Art.-Nr. 011-01-00021



#### Bellows for joystick HBC

with screws, size 61 x 61 mm

Art.-Nr. AET00080



#### Bellows for linear lever x 6

colour: black

Art.-Nr. 003-90-00444



## Blind plug for short-lift push button or micron-push button

with seal

Art.-Nr. 190-01-00028



#### Blind plug M10 for front plate

plastic, colour: black sealing: 003-03-00006

plastic nut: 004-02-00045 Art.-Nr. 003-90-00445







## 4. Transmitter - operating elements

#### Blind plug M12 for front plate

plastic, colour: black sealing: 003-03-00007 plastic nut: 004-02-00046 Art.-Nr. 003-90-00446



Button for joystick HBC or Euchner Art.-Nr. 011-01-00171



Coil for radiomatic® masterkey and radiomatic® iON

with 100 mm cable Art.-Nr. 107-90-00005



Coil for radiomatic® masterkey and radiomatic® iON

with 300 mm cable Art.-Nr. 107-90-00006



DJET push button with bellows

Art.-Nr. IE230001



#### Flat sea

for blind plug M10 003-90-00445 Art.-Nr. 003-03-00006



Flat seal

for blind plug M12 003-90-00446

Art.-Nr. 003-03-00007



#### Holder for radiomatic® iON

for VDT1 code Art.-Nr. 107-90-00017



#### Holder for radiomatic® iON

for VDT2 code Art.-Nr. 107-90-00020



# **Joystick Euchner with cross link** with bellows, type: KET 1234B

Art.-Nr. 011-01-00020







## 4. Transmitter - operating elements

#### Joystick Euchner without cross link

with bellows, type: KET 1234 BR Art.-Nr. 011-01-00011

Please specify the fabrication number!



#### Joystick HBC

with button

Art.-Nr. diverse

Please specify the fabrication number!



#### Key switch

for micron 3/5, closure no. M1, with 1

Art.-Nr. IE420101



#### Key switch

for micron 4, linus and radius, closure no. 1, with 1 key

Art.-Nr. IE420201



#### Key switch

for eco, linus 6 (eco L) and spectrum, closure no. 1, with 1 key  $\,$ 

Art.-Nr. IE420001



#### Linear lever

for linus 4/6 (eco L) and spectrum

Art.-Nr. diverse

Please specify the fabrication number!



#### Microswitch for joystick

HBC and Akerström

Art.-Nr. 011-01-00124



#### Plastic nut

for STOP impact switch micron 3/4/5

Art.-Nr. 004-02-00035



#### Plastic nut M10

for blind plug 003-90-00445

Art.-Nr. 004-02-00045



#### Plastic nut M12

for blind plug M12 003-90-00446

Art.-Nr. 004-02-00046







## 4. Transmitter - operating elements

#### Potentiometer 4,7 kOhm

type: PE30-AC-4,7k-A-20, without

Art.-Nr. IE340001



#### Push button one-step

for micron 3/4/5, without rubber cap

Art.-Nr. IE230004



#### Push button two-step

for micron 3/4/5, without rubber cap

Art.-Nr. IE230005



#### radiomatic® iON

with VDT1 code

Art.-Nr. diverse

Please specify the fabrication number!



#### radiomatic® iON

with VDT2 code

Art.-Nr. diverse

Please specify the fabrication number!



#### radiomatic® masterkey

without protection, with code

Art.-Nr. IE420121

Please specify the fabrication number!



#### radiomatic® masterkey

with protection, with code

Art.-Nr. IE420122

Please specify the fabrication number!



#### Rotary button for Elma rotary switch

Art.-Nr. 101-90-00072



#### Rotary button for rotary switch

for linus 4/6 (eco L), radius, vector, orbit and radiomatic® visio

Art.-Nr. 101-90-00017



#### Rotary button for rotary switch

for micron 4/5 with 3 steps

Art.-Nr. 101-90-00010







### 4. Transmitter - operating elements

#### Rotary button for rotary switch

for micron 4/5 with 4 steps Art.-Nr. 101-90-00011



#### Rotary button for rotary switch

for micron 4/5 with 5 steps Art.-Nr. 101-90-00012



#### Rotary button for rotary switch

for micron 4/5 with 2 steps Art.-Nr. 101-90-00009



#### Rotary button for rotary switch

for micron 4/5 with 0 steps, dummy Art.-Nr. 101-90-00008



#### Rotary button for rotary switch

for micron 3, plastic Art.-Nr. 101-90-00140



### Rotary button for spring-return switch

for micron 4/5 with 3 steps, unlatched-0-unlatched Art.-Nr. 101-90-00013



#### Rotary switch 2 x 6 positions

for micron 3, linus, orbit and vector, with fastening material, without button Art.-Nr. 101-90-00116



#### Rotary switch Elma 1 x 12

for eco and spectrum, with button and cover platelet BV 22671 Art.-Nr. IE320005



#### Rotary switch Elma 2 x 6

for eco and spectrum, with button and cover platelet BV 22672

Art.-Nr. IE320002



#### Rotary switch Elma 3 x 4

for eco and spectrum, with button and cover platelet BV 22673

Art.-Nr. IE320003









## 4. Transmitter - operating elements

#### Rotary switch Elma 4 x 3

for eco and spectrum, with button and cover platelet BV 22674

Art.-Nr. IE320004



#### Rotary switch for micron 4/5

with nut, without button Art.-Nr. 011-01-00086



#### Rubber cap for micron push button

micron 3/5/6, with plastic clamp ring Art.-Nr. AET00050



#### Rubber cap for micron push button

micron 4, with plastic clamp ring Art.-Nr. AET00060



#### Rubber cap for quadrix push button

Art.-Nr. AET00150



#### Rubber mat cubix

with metal activator, x 8 Art.-Nr. AET00030



#### Rubber mat cubix

with metal activator, x 6

Art.-Nr. AET00020



#### Rubber mat orbit

with metal activator, x 8 Art.-Nr. AET00130



### Seal disk for rotary switch micron 4/5

d = 19 x 6 mm

Seal ring large: 003-02-00005 Seal ring small: 003-02-00010

Art.-Nr. 003-90-00020



### Seal for key switch micron 4

inside diameter = 16 mm Art.-Nr. 050-01-00046







## 4. Transmitter - operating elements

### Seal for key switch or STOP impact

inside diameter = 22 mm Art.-Nr. 050-01-00035



#### Seal ring for micron 4/5 seal disk

7,5 x 1,8 mm, for seal disk 003-90-00020 Art.-Nr. 003-02-00010



#### Seal ring for micron 4/5 seal disk

13 x 2 mm, for seal disk 003-90-00020 Art.-Nr. 003-02-00005



#### Short-lift push button, long type

for spectrum, one-step, without protective kit Art.-Nr. IE230016



#### Short-lift push button, short type

for eco, one-step, without protective kit

Art.-Nr. IE230015



#### Single-axis analogue joystick

with 7-pole pin strip, JC 100-002 Art.-Nr. 011-01-00013 Please specify the fabrication number!



#### Spare key for key switch

micron 4, closure no. 1

Art.-Nr. 101-90-00049



#### Spare key for key switch

for eco, linus 6 (eco L) and spectrum,

closure no. 1

Art.-Nr. 101-90-00080



#### Spare key for key switch

micron 3/5, closure no. M1

Art.-Nr. 101-90-00001



#### Spring-return button Elma

type: BV 22572, without button

Art.-Nr. IE330001









## 4. Transmitter - operating elements

Spring-return key button closure no. 1, with 1 key Art.-Nr. IE430001



STOP impact switch

for micron 3, with wiring, (without nut, without adapter) Art.-Nr. IE220005



STOP impact switch

for spectrum, eco and linus 6 (eco L) Art.-Nr. 011-01-00235



#### STOP impact switch

for micron 4/5, with wiring (without nut, without adapter) Art.-Nr. IE220001



#### Toggle switch large type

without water protection cap

Please state function of the toggle switch!

Art -Nr diverse

Please specify the fabrication number!



#### Toggle switch latched-0-latched

small type, type: 8868-K-1 Art.-Nr. IE120003



#### Toggle switch latched-0-latched

large type, type: 8500-K-1

Art.-Nr. IE120007



#### Toggle switch latched-0-unlatched

small type, type: 8868-K-3

Art.-Nr. IE110001



#### Toggle switch latched-0-unlatched

large type, type: 8530-K-3

Art.-Nr. IE110002



### Toggle switch latched-0-unlatched

large type, type: 8536 K-3-N, pull

locked

Art.-Nr. IE150001









## 4. Transmitter - operating elements

**Toggle switch latched-latched** small type, type: 8868-K-4 Art.-Nr. IE120009



**Toggle switch latched-latched** large type, type: 8530-K-4

Art.-Nr. IE120010



Toggle switch small type

without water protection cap Please state function of the toggle switch!

Art.-Nr. diverse

Please specify the fabrication number!



Toggle switch unlatched-0

small type, type: 8868-K-6 Art.-Nr. IE130001



Toggle switch unlatched-0-unlatched

small type, type: 8868-K-2 Art.-Nr. IE130002



Toggle switch unlatched-0-unlatched

large type, type: 8530-K-2 Art.-Nr. IE130005



#### Toggle switch, latched-O-latched

large type, type: 8536 K-1-A, pull

locked

Art.-Nr. IE150006



## Water protection cap for toggle switch

without interlocking Art.-Nr. 011-01-00055





## Water protection cap for toggle switch

with interlocking

Art.-Nr. 011-01-00075



#### Page 30



#### 5. Transmitter - batteries and accessories

#### <strong>NC-battery FuB 07EEx</strong>

(EEx-explosion-protected), colour: 8,4 V/500 mAh

Art.-Nr. BE207000

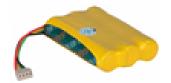
#### <strong>NiMH-battery, BA214061 </strong>

2 x 6 V/1500 mAh, color: blue

Art.-Nr. BA214061

#### Battery pack cubix

3,6 V/730 mAh, with cable Art.-Nr. BI2090B1



#### NiCd battery FuB 06 EEx

7,2 V/1000 mAh, explosion-protected, for FST 735, colour: black

Art.-Nr. BE206000



#### NiCd battery FuB 604

12 V/600 mAh, colour: grey Art.-Nr. BA604080



#### NiMH battery BA214060

2 x 6 V/1500 mAh, colour: blue Spare for NiCd battery FuB 10 AA/XL, BA210040 and BA211060 Art.-Nr. BA214060



#### NiMH battery BA222060

6 V/650 mAh, colour: blue Spare for NiCd battery FuB 3 A, BA203060

Art.-Nr. BA222060



#### NiMH battery BA223000

3,6 V/2100 mAh, colour: black Art.-Nr. BA223000



#### NiMH battery BA223030

3,6 V/2100 mAh, colour: orange Art.-Nr. BA223030



#### NiMH battery BA225000

6 V/1500 mAh, colour: black Spare for NiCd battery FuB 05 AA/XL, BA205000 and BA206000

Art.-Nr. BA225000









### 5. Transmitter - batteries and accessories

#### NiMH battery BA225030

6 V/1500 mAh, colour: orange Spare for NiCd battery FuB 05 AA/XL, BA205030 and BA206030

Art.-Nr. BA225030



#### NiMH battery FuB 9 NM

6 V/650 mAh, colour: black Art.-Nr. BA209000



#### NiMH battery FuB 9 NM

6 V/650 mAh, colour: blue Art.-Nr. BA209060



#### Tele Teach In battery TTB 05

with 2 push buttons, colour: orange Art.-Nr. BT225030



#### Tele Teach In battery TTB 10

with 2 push buttons, colour: red

Art.-Nr. BT213020







### 6. Battery chargers and accessories

#### **Battery compartment**

for FuB 9 NM colour: black Art.-Nr. QC001A00



#### **Battery compartment**

for BA223030 and BA223000 colour: black
Art.-Nr. QC003A00



#### **Battery compartment**

Art.-Nr. QC005A00

for BA225030 and BA225000, (BA222060 only with adapter 003-90-00084) colour: black



#### Charging slot adapter for QC005A00

to charge BA222060 colour: black Art.-Nr. 003-90-00084



# Plug-in charger for battery compartment QC001A00 and QC005A00

with cigarette lighter plug, 12-32 V/DC, 700 mA  $\,$ 

Art.-Nr. QD112300



## Plug-in charger for battery compartment QC003A00

with 4 country adapters, 100-240 V/AC Art.-Nr. QA103600



# Plug-in charger for cubix Blue Edition

with cigarette lighter plug, 12-32 V/DC, 600 mA Art.-Nr. QD107300



## Plug-in charger for cubix Blue Edition

with 4 country adapters, 100-240 V/AC, 600 mA Art.-Nr. QA107600



#### Power supply for cubix

with 4 country adapters, 100-240 V/AC Art.-Nr. PA006010



#### Power supply for cubix

with cigarette lighter plug, 12-24 V/DC Art.-Nr. PD009010







## 6. Battery chargers and accessories

### Rocker switch for double slot

FLG 701, FLG 702 or FLG 102 (green, illuminated)

Art.-Nr. IE120011



#### Rocker switch for FLG

FLG 701 and FLG 702, with O - I designation

Art.-Nr. IE120012



#### Single slot charger FLG 110B 115 V/AC

for battery BA214060, colour: black Art.-Nr. QA110400



### Single slot charger FLG 110B 230

for battery BA214060, colour: black Art.-Nr. QA110500



#### Single slot charger FLG 110B EEx 230 V/AC

for ex-protected battery BE206000, colour: black

Art.-Nr. QE110500



#### Single slot charger QA109600 100-240V/AC

700mA charging current for battery BA2250\_0,BA222060 and BA2090\_0,colour:blackwith 2 charger slot adapters for BA222060 and BA2090\_0 and US connecting cable 2

Art.-Nr. 190-01-00060



#### Single slot charger QA109600 100-240V/AC

700mA charging current for battery BA2250\_0,BA222060 and BA2090\_0,colour:black,with 2 charger slot adapters for BA222060 and BA2090\_0 and EU connecting cable 2

Art.-Nr. 190-01-00059



#### Single slot charger QA109600 100-240V/AC

700mA charging current for battery BA2250\_0,BA222060 and BA2090\_0,colour:black,with 2 charger slot adapters for BA222060 and BA2090\_0 and UK connecting cable 2

Art.-Nr. 190-01-00061



## Single slot chargerQD 11510-30

for battery BA214060, with discharge push button, with cigarette lighter plug, colour: black

Art.-Nr. QD115300



#### Transformator for FLG 105B (QA105500)

Typ: UI30/10,5 with cable for 230 V/AC

Art.-Nr. 007-01-00003







#### 7. Receiver - accessories and antennas

#### Active antenna focus D

DECT-transceiver, cable length: 5 m Art.-Nr. AA070006



### Antenna cable, length: 1 m

BNC-plug to mini crimp bushing,

matching for AA060006, AA060002, AA060003 Art.-Nr. AA020006



#### Antenna cable, length: 1 m

BNC-plug to N-plug,

matching for AA050006, AA050005 Art.-Nr. AA020012



#### Antenna cable, length: 10 m

BNC-plug to mini crimp bushing,

matching for AA060006, AA060002, AA060003 Art.-Nr. AA020009



### Antenna cable, length: 10 m

BNC-plug to N-plug,

matching for AA050006, AA050005 Art.-Nr. AA020015



#### Antenna cable, length: 3 m

BNC-plug to mini crimp bushing,

matching for AA060006, AA060002, AA060003 Art.-Nr. AA020007



#### Antenna cable, length: 3 m

BNC-plug to N-plug,

matching for AA050006, AA050005 Art.-Nr. AA020013



#### Antenna cable, length: 5 m

BNC-plug to mini crimp bushing,

 $\begin{array}{ll} \text{matching for AA060006, AA060002,} \\ \text{AA060003} \end{array}$ 

Art.-Nr. AA020008



#### Antenna cable, length: 5 m

BNC-plug to N-plug,

matching for AA050006, AA050005 Art.-Nr. AA020014



## Antenna focus I for radiomatic® infrakey

infrared receiver module, cable length: 5 m Art.-Nr. AI070001







#### 7. Receiver - accessories and antennas

#### **BNC** built-in bushing

for single-hole assembly, 50 Ohm, max. 3,5 mm

Art.-Nr. 010-01-00004



#### Car antenna

minicrimp, frequency range: 870-960 MHz, length: 310 mm

Art.-Nr. AA060002



#### Car antenna

minicrimp, frequency range: 406-440

MHz, length: 180mm Art.-Nr. AA060006



#### Extension cable for focus D & I

length: 10 m Art.-Nr. AJST0094



#### Extension cable for focus D & I

length: 5 m

Art.-Nr. AJST0093



#### Extension cable for focus D & I

length: 20 m Art.-Nr. AJST0095



#### Holding magnet for receiver (1 piece)

size: 63 x 14 mm, with cylinder bore, 6,5 mm for M6

Art.-Nr. 009-90-00005



#### Receiver holding bracket (1 pair)

with screws and butterfly nuts

Art.-Nr. 190-01-00029



#### Receiver holding straps (1 pair)

for HEG 270, with fastening material

Art.-Nr. 106-02-00001



#### Silent block M6 (1 set)

1 set = 4 pieces with nuts and washers

25 x 20 mm

Art.-Nr. AS0004B0









#### 7. Receiver - accessories and antennas

#### Silent block M8 (1 set)

1 set = 4 pieces with nuts and washers, 40 x 30 mm Art.-Nr. AS0005B0



#### UHF-antenna FL 30

BNC, with water protection cap, frequency range: 790-960 MHz Art.-Nr. AA020004



#### UHF-antenna FL 70

BNC, with water protection cap, frequency range: 410-470 MHz Art.-Nr. AA020002



#### Yagi antenna with mast holder

with N-bushing, frequency range: 432-438 MHz, with approx. 5 dB gain, length: 450 mm
Art.-Nr. AA050006



#### Yagi antenna with mast holder

with N-bushing, frequency range: 860-920 MHz, with approx. 5 dB gain,

length: 300 mm Art.-Nr. AA050005







#### 8. Printed circuit boards and RF-modules

<strong>Transmitter printed circuit
board cubix Blue Edition/strong>

with 6 x two-step push buttons, VDT 2

Art.-Nr. MTC20021

Please specify the fabrication number!

Auto-Power-Off-module

SMD-type

Art.-Nr. 172-90-00121



**DECT module MD32** 

Version: TIS-SW 6.007 Art.-Nr. TDMD2021



Receiver power supply printed circuit board

for FSE 716

Art.-Nr. PA001010

Please specify the fabrication number!



Receiver relay printed circuit board

8 normally open relay, AC Art.-Nr. OR005120

Please specify the fabrication number!



Receiver relay printed circuit board

6 normally open relay, 2 normally

closed relay, AC Art.-Nr. OR005170

Please specify the fabrication number!



Receiver relay printed circuit board

6 normally open relay, 2 normally closed relay, DC

Art.-Nr. OR006121

Please specify the fabrication number!



Receiver relay printed circuit board

8 normally open relay, DC Art.-Nr. OR006111

Please specify the fabrication number!



RF data radio receiver

FuE 671/3

Art.-Nr. diverse

Please specify the fabrication number!



RF data radio transmitter

FuS 671/3

Art.-Nr. diverse







#### 8. Printed circuit boards and RF-modules

#### RF transceiver module

TC 680

Art.-Nr. diverse

Please specify the fabrication number!



### Transmitter printed circuit board

fitted with 8 push buttons Art.-Nr. MT026013

Please specify the fabrication number!



#### Transmitter printed circuit board cubix

fitted with 6 push buttons

Art.-Nr. MT026023

Please specify the fabrication number!



#### Transmitter printed circuit board eco/spectrum

Art.-Nr. MT003020

Please specify the fabrication number!



## Transmitter printed circuit board

equipped with 8 x two-step and 2 x one-step push buttons

Art.-Nr. MT002011

Please specify the fabrication number!



### Transmitter printed circuit board

with 10 x two-step push buttons and 2  $\,$ 

x rotary switches

Art.-Nr. MT019070

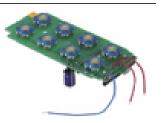
Please specify the fabrication number!



## Transmitter printed circuit board

equipped with 8 push buttons

Art.-Nr. MT009010





## 9. Relays and fuses

Ceramic tube fine fuse 5 x 20 mm Please state current intensity (ampere) and release characteristics (T, MT, F) of the fuse!

Art.-Nr. diverse

Please specify the fabrication number!



Finest fuse Picofuse 0,5 A/250 V

axial (7,2 x 2,4 mm), F (super) quick-acting

Art.-Nr. 009-03-00071



Finest fuse Picofuse 1,0 A/125 V

axial (7,2 x 2,4 mm), F (super) quick-acting

Art.-Nr. 009-03-00055



Finest fuse Picofuse 2,0 A/125 V

axial (7,2 x 2,4 mm), F (super) quick-acting

Art.-Nr. 009-03-00066



Glass tube fine fuse 5 x 20 mm Please state current intensity (ampere) and release characteristics (T, MT, F) of the fuse!

Art.-Nr. diverse

Please specify the fabrication number!



Relay DE-1a1b-12V

1 x NC, 1 x NO

Art.-Nr. 011-02-00025



Relay DE-2a-12V

2 x NO

Art.-Nr. 011-02-00024



Schrack-relay

12 V, 1 x changeover contact

Art.-Nr. 011-02-00021



SDS-Relay

SP2-DC12 V, (emergency-stop-relay)

Art.-Nr. 011-02-00008



SDS-Relay

SP2-P-DC12 V, (emergency-stop-relay)

Art.-Nr. 011-02-00010







# 9. Relays and fuses

#### **SDS-Relay S2** 12 V, 2 x NO

Art.-Nr. 011-02-00012



SDS-Relay SF2-12 VDC 2 x NO, 2 x NC (emergency-stop-relay) Art.-Nr. 011-02-00003



**SDS-Relay ST1**12 V, 1 x NC, 1 x NO
Art.-Nr. 011-02-00015



**SDS-Relay ST2** 12 V, 2 x NO Art.-Nr. 011-02-00014





## 10. Cables, plugs, miscellaneous

#### Antenna cable in receiver

with SMB-bushing to BNC-bushing,

length: 230 mm Art.-Nr. AA020010



#### Antenna cable in receiver

with SMB-bushing to BNC-bushing, length: 500 mm

Art.-Nr. AA020011



#### Antenna cable in receiver

with MMCX-plug to SMB-bushing,

length: 90 mm Art.-Nr. AA040005



#### Antenna cable in receiver

with MMCX-plug to BNC-bushing, length: 240 mm

Art.-Nr. AA080005



#### Antenna cable in receiver

with MMCX-plug to BNC-bushing,

length: 350 mm Art.-Nr. AA080006



#### Connection cable for cable option

length: 20 m Art.-Nr. AJST0081



#### Flat band cable 16 pins

1 plug, colour-coded, length: 550 mm

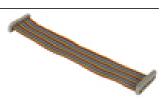
Art.-Nr. 012-04-00004



#### Flat band cable 34 pins

2 plugs, colour-coded, length: 250 mm

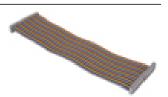
Art.-Nr. 012-04-00002



#### Flat band cable 60 pins

2 plugs, colour-coded, length: 290 mm

Art.-Nr. 012-04-00006



#### Fuse holder, vertical

square with 4 connections, 5 x 20 mm  $\,$ 

Art.-Nr. 009-02-00002







## 10. Cables, plugs, miscellaneous

**Fuse holder, vertical** square with 2 connections, 5 x 20 mm Art.-Nr. 009-02-00003



**Fuse holder, vertical** circular with 2 connections, 5 x 20 mm Art.-Nr. 009-02-00009







#### HBC-General Sales and Delivery Terms and Conditions – Version dated September 2003

#### 1. Exclusive validity

- 1.1 The following sales and delivery terms and conditions apply to all present quotations and deliveries from HBC and for dealers to all future ones as well. The customer's purchasing and other conditions apply only insofar as they do not contradict the following conditions or HBC has agreed them in writing.
- 1.2 Different agreements and (oral) additional clauses acquire validity only if they are confirmed in writing by HBC.

#### 2. Quotation, signing of contract

- 2.1 Quotations from HBC are subject to alteration and are prepared on the basis of the documents and information available to HBC on the day the quotation is drawn up.
- 2.2 A contract comes into force only on receipt of the contract confirmation or when the goods are delivered by HBC.
- 2.3 The customer is bound by his orders for 21 days.
- 2.4 HBC retains the title and all copyrights to cost estimates, samples, drawings and other documents handed to the customer. They may not be made accessible to third parties without the agreement of HBC and, if requested, are to be returned to HBC together with all copies made therefrom.

#### 3. Prices, payment conditions

- 3.1 Unless stipulated otherwise in the contract confirmation, invoices are due on receipt and payable within 10 days at a discount of 2% or within 30 days pure net. Repairs are payable immediately pure net without a discount.
- 3.2 Payments must be made free of costs and charges into HBC's bank accounts stated on the invoice.
- 3.3 Bills of exchange are not accepted by us, cheques merely in payment of a
- 3.4 All prices are understood to exclude VAT at the legal rate on the day of nvoicing as well as freight, packaging and transportation insurance ex works Crailsheim.

#### 4. Default of payment

- 4.1 If a customer is more than ten days in arrears with a payment, if he allows bills of exchange or cheques to be protested, if insolvency proceedings are instituted against him or if individual enforcement measures are taken against him, HBC is entitled, without prejudice to other rights:
  - a) if the delay/protest relates to a financing or redemption agreement, to make all claims hereunder due immediately;
  - b) to withhold all deliveries or services from contracts not yet fulfilled or to provide them only against pre-payment;
  - c) to enforce all rights arising from the retention of title (paragraph 10).
- 4.2 In the case of a delay HBC is entitled in addition to claim default interest at the legal rate. HBC reserves the right to claim for a demonstrably greater loss.

#### 5. Setting-off, retention

- 5.1 The customer can give notice of offsetting against the claims of HBC only if the customer's claim is undisputed or has been legally determined.
- 5.2 In commercial transactions the customer can claim a right to refuse to per form a service or a right to offset only if the customer's claim is undisputed or has been legally determined.

#### 6. Delivery and delivery time, self-distribution

- 6.1 The observance of agreed delivery deadlines presupposes that the required permissions, documents to be provided by the customer, releases, services to be provided as well as other obligations on the part of the customer are provided or fulfilled punctually. If this does not happen or alterations are made at the customer's request after the contract has been signed, the deadline will be extended by an appropriate period. With agreed delivery deadlines it is not a question of fixed deadlines.
- 6.2 The delivery deadline is considered to have been observed if, before its expiry, the ordered goods have left the warehouse or the notice of readiness

- for despatch has been sent.
- 6.3 If the non-observance of an agreed delivery deadline is attributable to force majeure, legitimate industrial dispute, natural catastrophes, operational breakdowns, unforeseen obstacles or other circumstances not attributable to HBC, the delivery deadline will be extended for the duration of these events. This will apply appropriately should HBC be behind with its delivery at the start of one of these events.
- 6.4 In the case of a delay lasting more than 3 months in the provision of a service in the sense of paragraph 6.3, both HBC and the customer are entitled to withdraw from the contract on account of the delayed delivery, but in the case of non-observance of the delivery deadline for reasons other than those mentioned in paragraph 6.3, only the customer is entitled to withdraw. A pre-requisite for a withdrawal by the customer is that he has set HBC in writing an appropriate extension of the delivery deadline (of at least three weeks' duration).
- 6.5 HBC is entitled to make a delivery in advance as well as to make part-deliveries of a size suitable for the customer. Part deliveries can be invoiced immediately by HBC.
- 6.6 HBC reserves the right in each case to make a correct and punctual distribution itself unless in this respect HBC encounters a debt.

#### 7. Transfer of risk and despatch

- 7.1 The customer is under an obligation to accept the goods at the agreed acceptance location within eight days of receipt of the notice of readiness
- 7.2 Insofar as the customer wishes to take delivery at another location this takes place at the customer's risk, being invoiced to the customer at cost price. The same applies to possible returned consignments unless these are as a result of a fault covered by guarantee or another circumstance, for which HBC is responsible. HBC determines the carrier, without accepting liability therefor, so that the cheapest and quickest method of despatch is obtained. The customer's despatch instructions are binding on HBC only if they have been confirmed by HBC in writing.
- 7.3 The risk is transferred to the customer with the handing over of the goods, in the case of 7.2 when the goods are handed over to the carrier, including cases where part deliveries are made or HBC has undertaken additional services, e.g. transport costs or carriage.
- 7.4 If the customer is late in accepting delivery or the delivery is delayed for other circumstances, for which he is responsible, the risk is transferred to the customer from the date of the notice of readiness. In these cases the purchase price is also due from the date of the notification of readiness for despatch. The customer is responsible for storage costs at the premises of HBC or of a third party. This does not affect a claim for compensation from the customer in excess of this.

#### 8. Guarantee

- 8.1 Within the scope of the following clauses HBC guarantees that deliveries are free from defects in the legal guarantee sense and that the written agreed specifications have been observed as well as the properties guaranteed in writing by HBC.
- 8.2 The guarantee period amounts to 12 months. The legal guarantee period also applies to consumers in the cases referred to in §§ 438, para. 1 No.2 and 634a para. 1 No.2 of the German Civil Code.
- 8.3 In the case of justified complaints HBC, at its discretion, will either replace or rectify the faulty object free of charge. With regard to the delivery of goods (purchase), if the customer is a consumer he can choose between replacement and rectification. If HBC is not prepared or not in a position to be able to rectify the fault/provide a replacement and fails to do so beyond an appropriate deadline for reasons, for which HBC is responsible or if the rectification of the fault/ replacement fails in some other way, the customer is entitled, at his discretion, either to withdraw from the contract or to demand an appropriate reduction in the purchase price (reduction).
- 8.4 The rights under guarantee of the commercial customer require that the latter has properly fulfilled the investigative- and reciprocal obligations imposed upon him under §§ 377 and 381, para. 2 of the Commercial Code. Any complaints (including shortages) must be notified to us in writing without delay, at the latest, however, within 14 days following delivery, otherwise the purchaser can derive no further rights hereunder. Damage or losses





#### HBC-General Sales and Delivery Terms and Conditions – Version dated September 2003

caused during transportation must be notified to us without delay, at the latest, however, within the deadline stated on the packing units. Obligations to make further notifications (such as a claim for damage against the carrier) are not affected by this.

- 8.5 Claims under guarantee are not entertained if the faults, which have occurred, are in relation of cause and effect so that – an obvious fault is not notified with 2 weeks;
  - the purchaser has not observed the regulations concerning handling, maintenance, care and conditions of use;
  - the purchased object has been operated in a manner not recognised by the manufacturer/importer or repaired, maintained or serviced by the customer himself
  - spare parts not recommended by the manufacturer/importer have been used or accessories added.
- 8.6 In the case of a fault complained about by the customer, which is not a fault under guarantee, or for which the guarantee has expired, HBC is entitled to charge the customer for labour and material costs involved as well as an inclusive fee for travelling.
- 8.7 Insofar as deliveries from HBC contain foreign products guarantees provided by the manufacturer will be passed on to the customer, if applicable, without any liability on the part of HBC.

#### 9. Liability

- 9.1 Claims for compensation no matter of what kind are excluded if HBC, its legal representative or agents have acted slightly negligently. This exclusion of liability does not apply if guaranteed properties are missing or important contractual obligations have been infringed in a manner endangering the fulfilment of the purpose of the contract. In the latter cases, however, liability is limited to the scope of the guarantee or, in the case of slightly negligent infringement of important contractual obligations to contractually typical, foreseeable losses.
- 9.2 The aforementioned limitation of liability does not apply to claims under the Product Liability Law.
- 9.3 Insofar as the liability of HBC is excluded or limited, this also applies to the personal liability of the staff members, contractors, assistants, representatives and agents of HBC.

#### 10. Retention of title

- 10.1 HBC retains the title to the goods delivered to the customer until payment is made in full. The retention of title also applies to all claims, which had already arisen at the time this contract was signed; it addition it extends to all claims arising from subsequent business, particularly deliveries of spare parts and after sales services ("retained goods"). This also applies if individual or all claims are included in a current invoice and the balance is drawn and recognised.
- 10.2 The customer is under an obligation to treat the retained goods with care and particularly to take out and maintain, at his expense, insurance cover against the customary risks (including fire and theft). At his own expense the customer must undertake maintenance and inspection work punctually in accordance with the manufacturer's recommendations, or permit it to be undertaken by HBC or by a firm recognised by HBC or the manufacturer.
- 10.3 The customer is entitled to pledge, assign by way of security, hire or transfer the retained goods abroad only following the prior written agreement of HBC. The customer is entitled to sell on the retained goods in the course of his normal business operations.
- 10.4 The customer assigns at this stage to HBC all claims and demands for compensation, to which he is entitled in respect of the sale or otherwise of the retained goods (e.g. claims arising from unauthorised handling of the goods, insurance claims) to the amount of the invoiced value of the retained goods in an agreed current account amounting to the sum of the outstanding balance.
- 10.5 In the case of actions by a third party against the retained goods the customer has to draw attention to HBC's title and to notify HBC in writing without delay. If the third party is not in a position to compensate HBC for the legal and non-legal costs of a lawsuit in accordance with § 771 of the Rules of Civil Procedure, the customer is liable for the expenditure incurred.

- 10.6 If the retained goods are inseparably combined with objects, which do not belong to HBC, HBC acquires co-ownership in the new object in the proportion of the value of the retained goods to the other combined objects at the time of the combination. If the combination takes place in such a manner that the customer's article is to be regarded as the main article, it is considered to have been agreed that the customer transfers co-ownership to HBC proportionately. The customer will hold the sole-ownership or the co-ownership, which has thus come about, on behalf of HBC. The customer also assigns to HBC by way of security the claims against a third party, which accrue to him through the combination of the retained goods with a property.
- 10.7 If the realisable value of the securities assigned by the customer, to which HBC is entitled from the retention of title, exceed the existing total claim against the customer by more than 20%, HBC is obliged, at the customer's request, to release its choice of the securities, to which HBC is entitled under this agreement, down to the agreed value limit.

#### 11. National postal regulations and export

- 11.1 Remote-controlled radio installations can be operated at home and abroad only with the special permission of the national postal authorities (Post, Telephone, Telegraph) and only on the assigned operational frequencies. Excepted from this is equipment with a temporary authorisation. Authorisation procedures vary from country to country.
- 11.2 In an individual case the purchaser must clarify whether PTT approval exists.
- 11.3 A sale by the purchaser to foreign clients takes place at his sole risk. In the case of an export the customer releases HBC from all claims relating to product liability. In such a case the customer is also responsible for observing the valid import and export regulations.

#### 12. Place of fulfilment, place of jurisdiction

- 12.1 The place of fulfilment for all claims arising from the contract concluded between the customer and HBC is Crailsheim.
- 12.2 If the customer is a merchant in the sense of HBC, it is agreed with the c customer that Crailsheim is the place of jurisdiction for all disputes arising from the contracts.

#### 13. Applicable law, validity, written form

- 13.1 The law of the German Federal Republic applies. The application of the standard international purchasing law (UN Convention on Contracts for the International Sale of Goods/UNCITRAD agreement) is excluded.
- 13.2 If individual integral parts of these sales and delivery terms and conditions are or become ineffective, the effectiveness of the remaining parts is not affected thereby.
- 13.3 Alterations and additions to the clauses contained in these conditions require the written form to become effective.
- 13.4 In accordance with § 33 of the Data Protection Act we draw your attention to the fact that, as part of our business operations, the necessary customer and supplier data is stored with the aid of electronic data processing.

General Sales and Delivery Terms and Conditions of the firm HBC-radiomatic  $\mbox{GmbH}$  ("HBC").





# Bestellformular Ersatzteile / Order Form Spare Parts

**Lieferadresse / Shipping address** 

**Rechnungsadresse / Billing address** 

			(talis abwellinella von neumlangsaaresse / ii deviaang nom your biling address)			
Name			Name			
Firma / Company			Firma / Company  Straße / Address  Ort / City			
Straße / Address						
PLZ, Ort / ZIP, City	,					
TelNr. / Tel. no.						
Fax			Bestell-Nr. / Order no.			
E-Mail			UstID / VAT-ID			
Kunden-Nr. / Cust	omer no.		Steuernr. / Tax no. (national)			
Menge /	Artikel-Nr. /	Artikelbezeichnung /		Sonstige / Other shipping  Bemerkung, Fabrika		
Quantity	Article no.		Description	Remarks, fabrica	Remarks, fabrication number	
Datum / Date		Unterschrift / Si	gnature			
	onen und Ersatzteil-Bestellungen: ation and spare part orders:	Fon: +49 7951 ( Fax: +49 7951 ( E-Mail: info@radio		Lieferungen ausschließlich gemäß unseren Lieferung ab Werk • Es gelten die mit uns Zahlungsbedingungen! Delivery only according to our general busi conditions!		



