



HOLMCO

AVIATION

Headsets · Handsets · Microphones





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AVIATION

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Our company was founded in Berlin in 1919. We develop and manufacture dynamic transducers, microphones, headsets and handsets, marketed worldwide under the **HOLMCO** trademark. Today the family-owned company employs 100 people.

HOLMCO has been developing and producing electro-acoustic equipment for use in aircraft since 1957.

Holmberg GmbH & Co. KG is an approved manufacturer of aviation products in accordance with EASA Annex requirements (Part 21), part A, subpart G, an approved maintenance organisation in accordance with EASA Annex II requirements (Part 145), part A, is certified to DIN EN 9100 (includes DIN EN 9001) and complies with EC directive 94/9/EG (equipment intended for use in potentially explosive atmospheres).

Holmberg GmbH & Co. KG is a member of the German Aerospace Industries Association (BDLI).

The user of **HOLMCO** products has access to a worldwide service network that is built upon many years of experience working within the European aviation industry. An AOG service with partners in Europe, Asia and America guarantees shortest delivery times. Detailed documentation is available on every product.

This brochure contains just a sample of our complete product range, with many different versions available. Don't hesitate to contact us to discuss your requirements. Together we will find the right solution.



Microphones for Radio, Intercom and Passenger Address Systems in Aircraft

The »legend« 57 Series Microphone



Dynamic microphone

With amplifier and PTT
70-inch (1.8 m) coiled cord

Sensitivity	60 mV/Pa
P/N 85-13-03409-01	PJ-068 plug
Sensitivity	120 mV/Pa
P/N 85-13-03414-01	PJ-068 plug
P/N 85-13-03417-01	NC-4-MXB plug (Neutrik)

Maintenance manual no. 23-51-40
JTSO authorisation no. LBA.O.10.919/13 JTSO



Dynamic microphone

Transducer fitted in a housing made by Mumetal
for special protection against magnetic fields
With amplifier and PTT
70-inch (1.8 m) coiled cord

Sensitivity	80 mV/Pa
P/N 85-13-05558-02	PJ-068 plug
P/N 85-13-09839-02	NC-4-MXB plug (Neutrik)

Maintenance manual no. 23-51-05
JTSO authorisation no. LBA.O.10.919/16 JTSO

Electret microphone

With amplifier and PTT
70-inch (1.8 m) coiled cord

P/N 85-13-06243-03

Sensitivity 60 mV/Pa

Connector PJ-068

P/N 85-13-06244-03

Sensitivity 60 mV/Pa

Connector NC-4-MXB (Neutrik)

P/N 85-13-06599-03 with limiting amplifier

Sensitivity 250 mV/Pa

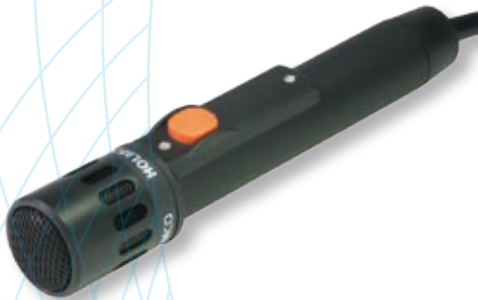
Maximum output level 400 mV

Connector NCSC8 (NEUTRICON)

Maintenance manual no. 23-30-17

JTSO authorisation no. LBA.O.10.919/15 JTSO





Dynamic hand-held microphone

Noise-cancelling, with amplifier and PTT

70-inch (1.8 m) coiled cord

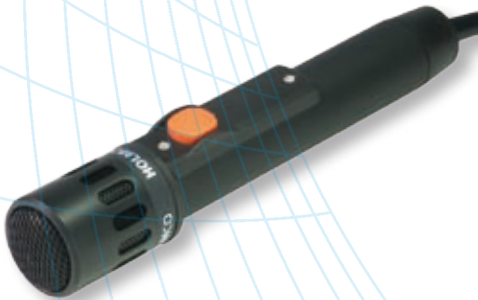
Microphone holder P/N 22-11-00004 included

Colour	black
Sensitivity	40 mV/Pa

P/N 85-03-04963-04	PJ-068 plug
P/N 85-03-06215-04	NC-4-MXB plug (Neutrik)
P/N 85-03-06451-04	without connector

Maintenance manual no. 23-30-02

JTSO authorisation no. LBA.O.10.919/14 JTSO



Hand-held electret microphone

Noise-cancelling, with amplifier and PTT

70-inch (1.8 m) coiled cord

Microphone holder P/N 22-11-00004 included

Colour	black
P/N 85-16-06343-05	
Sensitivity	60 mV/Pa
Connector	NC-4-MXB (Neutrik)

P/N 85-16-06961-05	
Sensitivity	40 mV/Pa
Connector	none

Maintenance manual no. 23-51-38

JTSO authorisation no. LBA.O.10.919/7 JTSO

Holders

For hand-held microphones series 85-03 and 85-16
(except P/N 85-16-11494-05 and 85-16-12022-05)



P/N 22-11-90004 with 4 fixing holes



P/N 22-11-90008 with 2 fixing holes

Hand-held electret microphone

Slim version

Without holder

Sensitivity	40 mV/Pa
Connector	NC-4-MXB (Neutrik)
P/N 85-16-11494-05	for A320
P/N 85-16-12022-05	for A380



Maintenance manual no. 23-51-38

JTSO authorisation no. LBA.O.10.919/7 JTSO



Handsets for Intercom and Passenger-Address Systems in Aircraft

Handset › cockpit

With PTT

Coiled cord, extended length 78 inches (2 m)

Colour	black or pepperdust
Microphone	noise-cancelling electret
Sensitivity	67 mV
Receiver system	electrodynamic
Sensitivity	105 dB rel 20 µPa, 1mW
DC resistance	570 ohms
Interface	9 pin SUB-D connector

Black version P/N 89-01-07000 handset
P/N 98-01-07900 cradle rest
(please order separately)

Pepperdust version P/N 89-01-07002 handset
P/N 98-01-07902 cradle rest
(please order separately)

Maintenance manual no. 23-73-01

JTSO authorisation no. LBA.O.10.919/5 JTSO



Cradle rest for the 89 handset series

P/N 98-01-07900 black

P/N 98-01-07902 pepperdust

Handset > cabin

With different keypads

Coiled cord, extended length 78 inches (2 m)

Colour	black or pepperdust
Microphone	noise-cancelling electret
Sensitivity	67 mV
Receiver system	electrodynamic
Sensitivity	105 dB rel 20 µPa, 1mW
DC resistance	570 ohms
Interface	9 pin SUB-D connector



e.g.

P/N 89-01-07020 black handset

P/N 98-01-07900 cradle rest (please order separately)

e.g.

P/N 89-01-07154 pepperdust handset with
extra-long cable, extended
length 157 inches (4 m)

P/N 98-01-07902 cradle rest (please order separately)

Maintenance manual no. 23-73-01

JTSO authorisation no. LBA.O.10.919/5 JTSO

There are many versions with different keypad inscriptions available. The illustrations below are just a sample from the range.



Handset with backlit keypad

Coiled cord, extended length 78 inches (2 m)

Colour	pepperdust
Microphone	noise-cancelling electret
Sensitivity	67 mV
Receiver system	electrodynamic
Sensitivity	105 dB rel 20 μ Pa, 1mW
DC resistance	570 ohms
Interface	9 pin SUB-D connector

e.g.

P/N 89-01-17182	handset
P/N 98-01-07902	cradle rest (please order separately)

Maintenance manual no. 23-73-04

JTSO authorisation no. LBA.O.10.919/023 JTSO



Version with Cyrillic keypad



Handset with extra-secure cradle-lock

Fixed for 16 g acceleration

Coiled cord, extended length 78 inches (2 m)

Colour	black
Microphone	noise-cancelling electret
Sensitivity	67 mV
Receiver system	electrodynamic
Sensitivity	105 dB rel 20 μ Pa, 1mW
DC resistance	570 ohms
Interface	T3636.000 connector

P/N 89-01-11652-18 handset

P/N 98-01-09750-18 cradle rest (please order separately)

Maintenance manual no. 23-73-03

JTSO authorisation no. LBA.O.10.919/025 JTSO



Digital handset with cradle rest

New digital series for A380

Digital transmission of voice and control signals

Customisable interface

User-programmable keypad with up to 19 illuminated keys

Dimmable brightness of all displays

Colours black, foggy, dark porcelain and pepperdust

Microphone high performance noise-cancelling electret

Microphone sensitivity 63 mV

Receiver system electrodynamic

Receiver sensitivity 105 dB rel 20 μ Pa, 1mW

Receiver impedance 150 ohms

Dialling frequency according to CCITT

Interface 9 pin SUB-D connector

For cockpit P/N N40-1A10301-103

For cabin P/N N40-1AXXX4XX-XX4
(general part number)

e.g.

P/N N40-1A20402-104 foggy, standard coiled cord

P/N N40-1A40402-204 pepperdust, extra-long coiled cord

Maintenance manual no. 44-10-02

ETSO authorisation in progress



Analog Handset with cradle rest

New analog series for pax/freighter flight-deck
and pax cabin/freighter courier-area

Different versions of keypad inscription available

Compatible to 89-01-XXXXX

for A318–A321 · A320F and A321F · A330–A340 and A330F

Colour	black, foggy, dark porcelain and pepperdust
Microphone	high performance noise-cancelling electret
Microphone sensitivity	63 mV
Receiver system	electrodynamic
Receiver sensitivity	105 dB rel 20 µPa, 1mW
Receiver impedance	570 ohms
Dialling frequency	according to CCITT
Interface	9 pin SUB-D connector

For pax/freighter flight-deck

P/N N40-1AXXX1XX-XX (general part number)

e.g.

P/N N40-1A10124-101 (for pax flight-deck, black)

P/N N40-1A10144-101 (for freighter flight-deck, black)

For pax cabin and freighter courier-area

P/N N40-1AXXX2XX-XX2 (general part number)

e.g.

P/N N40-1A20212-102 (for pax cabin, foggy)

P/N N40-1A40248-102 (for freighter courier-area, pepperdust)

Maintenance manual no. 44-10-03

ETSO authorisation in progress

*This series contains more than 60 types with
different colours and keypad configurations.*



Headsets for Aircraft Radio System (Cockpit)



Standard headset with low level microphone

Flexi-boom allows optimum positioning
of microphone on the right or left side
Noise-cancelling dynamic microphone
Soft ear-cushions guarantee exceptional comfort
70-inch (1.8 m) straight cord

Microphone	dynamic, noise-cancelling
Near-field sensitivity	1 mV/Pa
DC resistance	200 ohms
Headphones	dynamic
Power handling capability	100 mW per transducer
DC resistance	560 ohms (2 x 280 ohms in series)

P/N 90-06-04641-08	NC-4-FXB plug (Neutrik)
P/N 90-06-04905-08	PJ-055 and PJ-068 plugs
P/N 90-06-06058-08	NC-5-MXB plug (Neutrik)
P/N 90-06-08688-08	DS07-7P059 plug (COMPAGNIE DEUTSCH)

Maintenance manual no. 23-51-15
JTSO authorisation no. LBA.O.10.919/11 JTSO



Standard headset with dynamic microphone and amplifier

Flexi-boom allows optimum positioning of microphone on the right or left side
 Noise-cancelling dynamic microphone with pre-amplifier
 Soft ear cushions guarantee exceptional comfort
 70-inch (1.8 m) straight cord

Microphone	dynamic, noise-cancelling
Near-field sensitivity	64 mV/Pa
Output impedance	200 ohms
Headphones	dynamic
Power handling capability	100 mW per transducer
DC resistance	560 ohms (2 x 280 ohms in series)

P/N 91-06-08803	NC-4-MXB plug (Neutrik)
P/N 91-06-08802	PJ-055 and PJ-068 plugs
P/N 91-06-05362	NC-5-MXB plug (Neutrik)

Maintenance manual no. 23-51-06
 JTSO authorisation no. LBA.O.10.919/4 JTSO



Standard headset with electret microphone

Flexi-boom allows optimum positioning of microphone on the right or left side
 Noise-cancelling electret microphone with pre-amplifier
 Soft ear cushions guarantee exceptional comfort
 70-inch (1.8 m) straight cord

Microphone	electret, noise-cancelling
Near-field sensitivity	40 mV/Pa
Output impedance	200 ohms
Headphones	dynamic
power handling capability	100 mW per transducer
DC resistance	560 ohms (2 x 280 ohms in series)

P/N 91-06-11490-19	NC-4-MXB plug (Neutrik)
P/N 91-06-09835-19	PJ-055 and PJ-068 plugs
P/N 91-06-09715-19	NC-5-MXB plug (Neutrik)

Maintenance manual no. 23-51-43
 JTSO authorisation no. LBA.O.10.919/21 JTSO





Lightweight headsets

Noise-cancelling electret microphone with amplifier
Swivel-mounted flexible microphone boom
Three-piece adjustable headband, superb comfort
78-inch (2.0 m) straight cord

Microphone	electret, noise-cancelling
Near-field sensitivity	40 mV/Pa
Output impedance	200 ohms
Headphones	dynamic
Power handling capability	100 mW per transducer
DC resistance	550 ohms (2 x 1100 ohms in parallel)



Two different ear cups (2.4 inches on microphones side and 1.6 inches on the opposite side)

P/N 91-23-06578-07	NC-5-MXB plug (Neutrik)
P/N 91-23-06772-07	PJ-055/PJ-068 plugs
P/N 91-23-08237-07	PJ-068 plug

Two identical ear cups (2.4 inches on both sides)

P/N 91-23-09634-07	NC-5-MXB plug (Neutrik)
P/N 91-23-09597-07	PJ-055/PJ-068 plugs
P/N 91-23-09635-07	PJ-068 plug



Single adjustable headband

Swivel-mounted rigid microphone boom	
Ear-cup diameter 1.6 inches (40 mm) on both sides	
P/N 91-23-08501-07	NC-5-MXB plug (Neutrik)
P/N 91-23-08502-07	PJ-055/PJ-068 plugs

Maintenance manual no. 23-51-31

JTSO authorisation no. LBA.O.10.919/10 JTSO

Lightweight headsets, monaural

Noise-cancelling electret microphone with amplifier
78-inch (2.0 m) straight cord

Microphone	electret, noise-cancelling
Near-field sensitivity	40 mV/Pa
Output impedance	200 ohms
Headphone	dynamic
Power handling capability	100 mW
DC resistance	570 ohms



Swivel-mounted flexible microphone boom

Three-piece adjustable headband, superb comfort

P/N 91-23-11608-07 NC-5-MXB plug (Neutrik)

P/N 91-23-06831-07 PJ-055/PJ-068 plugs

Swivel-mounted rigid microphone boom

Single adjustable headband

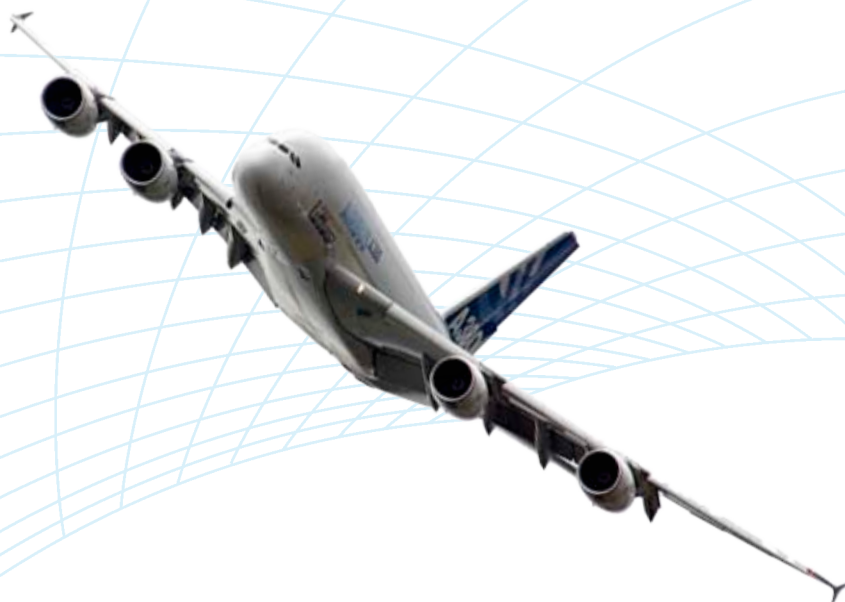
P/N 91-23-11641-07 NC-5-MXB plug (Neutrik)

P/N 91-23-09647-07 PJ-055/PJ-068 plugs



Maintenance manual no. 23-51-31

JTSO authorisation no. LBA.O.10.919/10 JTSO





Ear-protection headset with low-level microphone for helicopter radio systems

Superior noise-attenuation for hearing protection and clear, isolated reception

Noise-cancelling dynamic microphone

Flexi-boom allows optimum positioning of microphone on the right or left side

Extremely durable and reliable

70-inch (1.8 m) straight cord with U-93 A/U plug

P/N 90-04-06810-10	receiver 8 ohms, microphone 10 ohms
P/N 90-04-08022-10	receiver 14 ohms, microphone 7.4 ohms
P/N 90-04-09879-10	receiver 140 ohms, microphone 300 ohms
P/N 90-04-05582-10	receiver 480 ohms, microphone 34 ohms



Ground-Crew Headsets for Push-Back

Ear-protection headset with PTT

65-ft (20 m) straight cable with PTT and PJ-051 plug
 Superior noise-attenuation for hearing protection and clear, isolated reception
 Noise-cancelling dynamic microphone
 Flexi-boom allows optimum positioning of microphone on the right or left side
 Extremely durable and reliable

Microphone	dynamic, noise-cancelling, with amplifier
Near-field sensitivity	40 mV/Pa (adjustment range 1 to 80 mV/Pa)
Headphones	dynamic
Power handling capability	0.5 W
DC resistance	560 ohms (2 x 280 ohms in series)
Cable length	27 inches (0.7 m) from headset to PTT switch 65 ft (20 m) from PTT switch to plug

P/N 91-04-11474



Ear-protection headset with PTT and throat microphone

65-ft (20 m) straight cable with PTT and PJ-051 plug
 Throat microphone for good communication in a noisy environment
 Superior noise-attenuation for hearing protection and clear, isolated reception
 Extremely durable and reliable

Microphone	dynamic throat microphone with amplifier
Output level	40 mV/Pa
Headphones	dynamic
Power handling capability	0.5 W
DC resistance	560 ohms (2 x 280 ohms in series)
Cable length	23.6 inches (0.6 m) from headphone to microphone 35.4 inches (0.9 m) from headphone to PTT switch 65 ft (20 m) from PTT switch to plug

P/N 91-04-09899



Ear-protection headset with short cable

24-inch (0.6 m) straight cable with PJ-051 plug
 Noise-cancelling dynamic microphone
 Superior noise-attenuation for hearing protection and clear, isolated reception
 Flexi-boom allows optimum positioning of microphone on the right or left side
 Extremely durable and reliable

Microphone	dynamic, noise-cancelling, with amplifier
Near-field sensitivity	40 mV/Pa (adjustable from 1 up to 80 mV/Pa)
Headphones	dynamic
Power handling capability	0.5 W
DC resistance	560 ohms (2 x 280 ohms in series)
Cable length	24 inches (0.6 m)

P/N 91-04-12378



Ear-protection headset for low temperatures

For low temperatures down to -40°C
 24-inch (0.6 m) straight cable with PJ-051 plug
 P/N 91-04-12806

Extension cable with PTT

For P/N 91-04-12378 and P/N 91-04-12806
 Coiled cord with CIJ-051 female connector and PJ-051 male connector
 Extended length 52 ft (16 m)
 4 inches (0.1 m) from PTT-switch to CIJ-051 female connector
 Colour: orange
 P/N 93-01-12379

Ear-protection headset with NF10 plug

Short straight cable with PTT
 Superior noise-attenuation for hearing protection and clear, isolated reception
 Noise-cancelling dynamic microphone
 Flexi-boom allows optimum positioning of microphone on the right or left side
 Extremely durable and reliable

Microphone	dynamic, noise-cancelling
Near-field sensitivity	1.3 mV/Pa
DC resistance	300 ohms
Headphones	dynamic
Power handling capability	0.5 W
DC resistance	2 x 280 ohms (separately led out)
Cable length	31.5 inches (0.8 m) from headset to PTT switch 71 inches (1.8 m) from PTT switch to plug NF10 A 1 L0 plug

P/N 90-04-09000

Equipment for Air Traffic Control



Standard headset with low-level microphone for desk-station applications

Flexi-boom allows optimum positioning of microphone on the right or left side
 Noise-cancelling dynamic microphone
 Soft ear cushions guarantee exceptional comfort
 70-inch (1.8 m) straight cord without plug

Microphone	dynamic, noise-cancelling
Near-field sensitivity	1 mV/Pa
DC resistance	200 ohms
Headphones	dynamic
Power handling capability	100 mW per transducer
DC resistance	560 ohms (2 x 280 ohms in series)

P/N 90-06-04527-08



Monaural headset with low-level microphone for desk-station applications

Flexi-boom allows optimum positioning of microphone on the right or left side
 Noise-cancelling dynamic microphone
 Soft ear cushions guarantee exceptional comfort
 70-inch (1.8 m) straight cord without plug

Microphone	dynamic, noise-cancelling
Near-field sensitivity	1 mV/Pa
DC resistance	200 ohms
Headphone	dynamic
Power handling capability	100 mW
DC resistance	570 ohms

P/N 90-06-04619-08

Monaural headset for ATC communication

Noise-cancelling microphone
 Powerful receiver
 Lightweight
 Extremely comfortable to wear

Microphone	dynamic, noise-cancelling
Near-field sensitivity	1 mV/Pa
DC resistance	300 ohms
Headphone	dynamic
Power handling capability	100 mW
DC resistance	600 ohms

P/N 90-08-06469-039



All headsets for aircraft radio system are also available for desk-station applications for ATC with cables and plugs fitted to customer specification. The illustrations show just a sample of the range.



Microphones for ATC communication

We have various types of dynamic and electret microphones in hand-held and gooseneck versions.

*Please contact us to discuss your needs.
Together we will find the right solution.*



Handset for desk-station applications

Electret microphone with amplifier
 Excellent ambient-noise elimination
 Robust housing
 PTT key with 2 changeover contacts
 Cradle rest holds handset securely



Colour	black (pepperdust version available)
Microphone	noise-cancelling electret
Sensitivity	440 mV/Pa
Receiver system	electrodynamic
Power handling capability	200 mW (short time 500 mW)
DC resistance	240 ohms

P/N 89-01-09504	black handset
P/N 98-01-09503	cradle rest, basic version, black
P/N 98-01-11750	cradle rest with hook-switch, 3 break-contact keys, black

Small »control 5« loudspeaker

For airport counters etc.
 High power-handling capability
 Extremely robust shock-proof plastic housing
 and heavy-duty elastic bracket

Electroacoustic principle	electrodynamic
Nominal power handling capability	5 W
Nominal sound pressure level	82 dB
Nominal impedance	4 ohms

Loudspeaker with cable and bracket	P/N 74-01-08494
Base plate	P/N 98-08-08536



»control 5«



»control 5« with base plate

Headset for Airport Fire Brigade

SCORPION headset for protective helmet



- Noise-cancelling electret microphone
- Powerful receiver
- Lightweight, robust design
- Clear communication, even when wearing a breathing mask
- Quick-release connector
- Fits easily into a range of helmet types

You will need 3 components:

- SCORPION headset
- Helmet adapter for mounting in helmet
- Adapter cable with PTT for connection to the radio

Numerous helmet adapters for various helmet types are available as well as a wide range of adapter cables with PTT for different radio types.



Microphone	electret
Sensitivity	7.5 mV/Pa
Output impedance	2 kΩ up to 6 kΩ
Current drain	0.15 mA up to 0.45 mA
Receiver	dynamic
DC resistance	8 Ω
Nominal power handling capability	0.2 W (short time 0.4 W)
Sound pressure level	90 dB

e.g.

- P/N 90-26-09951 Headset SCORPION with coiled cord and LEMO plug
- P/N 22-11-00099 Adapter for Gallet F1 helmet
- P/N 93-01-11682 Adapter cable with PTT for Kenwood TK 290 and others

e.g.

- P/N 90-26-09951 Headset SCORPION with coiled cord and LEMO plug
- P/N 33-04-00335 Adapter for Dräger HPS 6200 helmet
- P/N 93-01-12206 Adapter cable with PTT for Sepura SRH3500 and others



