

Miniature Lavalier Condenser Microphones

INTRODUCTION

The MCE 5, 6 and 10 series lavalier microphones are high quality, miniature, condenser microphones designed and engineered to meet the most critical demands of broadcast, recording and sound reinforcement applications either in the studio or on-location.

Each microphone possesses extraordinary sonic quality that captures speech, vocal or instrumental music with startling accuracy under extremely high sound pressure level situations. The MCE 5, 6 and 10 are designed with rugged, ultra-reliable cable strain reliefs which dramatically reduce "cable borne" noise and vibration.

The MCE series are available in a wide range of cable and pre-amp options for both wireless and "hard wired" applications.

A wide range of precision engineered accessories are available for lavalier, musical instrument mounts and sound reinforcement installations.

The MCE series accessories are housed in low-profile, non-glare black anodized finished material designed to stand the most rigorous physical and environmental conditions.

MCE 5 DESCRIPTION

The MCE 5 is a high output omnidirectional condenser microphone with a durable and miniature design. It's wide range frequency response has been fine tuned to accurately reproduce speech during lavalier applications where the greatest vocal intelligibility is desired. The specially designed cable and strain relief system reduce undesirable "cable borne" noise and vibration while it's small size and black anodized finish makes the MCE 5 visually unobtrusive. A miniature, detachable windscreen is supplied with each microphone designed to reduce wind related noise by as much as 20 dB. Various versions with different terminations are available for a variety of interfaces, including wireless applications. The most popular version, the MCE 5.11 N(C) is terminated in a 3 pin XLR connector and can be battery or 12-48 volt phantom powered.

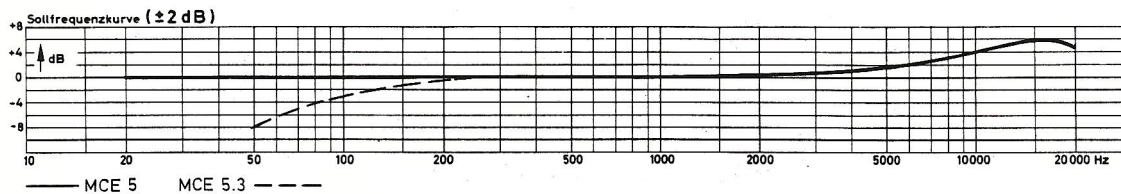
FEATURES

- Wide frequency response tailored for maximum speech intelligibility
- Consistent omnidirectional polar response
- Extremely small unobtrusive design
- Rugged, reliable cable strain relief yields reduced "cable borne" noise and vibration
- High sound pressure level capability
- Battery or phantom powerable
- Quickly interfacable with wireless bodypack transmitters
- Wide array of cable terminations for various applications

APPLICATIONS

The MCE5's startling sonic accuracy, fine tuned frequency response and unobtrusive, non-glare design make it a natural choice for the most demanding on air lavalier applications where maximum vocal intelligibility and minimal visual profile are desired. With a wide array of accessories, the MCE 5 may be set-up for single or dual lavalier applications either in the studio or on location.

FREQUENCY RESPONSE CURVE ($\pm 2,5$ dB)



This frequency response curve corresponds to typical machine run specifications from a standard MCE 5.

MODELS

- MCE 5** Condenser, omnidirectional, clip-on lavalier microphone. 7 mm diameter, 23 mm long. Matte black finish. Designed for use in TV and radio broadcasting and film and video production. Terminated in a 6 pin DIN connector which interfaces with the MES 5 VN (C) power supply. Supplied with a 4' cable, WS 5 windscreen, ZWS 5 foam windscreen and MKV 5/1 tie-clip-holder.
- MCE 5-3M** Same as the MCE 5 supplied with a 10' cable instead of the 4' cable.
- MCE 5.1N(K)** Same as the MCE 5 terminating in a 1/4" phone connector. The connector incorporates the power supply operable by a 5.6 volt battery (supplied). Supplied with a 10' cable, WS 5, ZWS 5 foam windscreen and MKV 5/1 tie-clip holder.
- MCE 5.3** Same as the MCE 5, but frequency response with bass roll-off
- MCE 5.4** Same as MCE 5, but higher sensitivity. In conjunction with MA 5 T 12 N(C).1 adapter recommended for Nagra and Stellavox tape recorders.
- MCE 5.5** For direct interface with Nagra SN model.
- MCE 5.6** Same as MCE 5.4, for direct interface with Stellavox and Nagra tape recorders.
- MCE 5.9** Same as the MCE 5 terminated open-ended for use with any wireless transmitter (with appropriate connector for interface). Supplied with a 10' cable, WS 5 windscreen, ZWS 5 foam windscreen and MKV 5/1 tie-clip holder.
- MCE 5.11N(C)** Same as the MCE 5 terminating in a 3 pin XLR connector. The connector incorporates the power supply operable by a 5.6 volt battery (supplied) or any 12-48 volt phantom power supply. Supplied with a 10' cable, WS 5 windscreen, ZWS 5 foam windscreen, MHV 5 power supply belt-clip and MKV 5/1 tie-clip holder.
- MCE 5.14** Same as the MCE 5.9 terminating in a 4 pin miniature connector for direct interface with beyerdynamic wireless transmitters TS 42. 10 - 10 ... 30 and TS 185. Supplied with a 4' cable, WS 5 windscreen, ZWS 5 foam windscreen and MKV 5/1 tie-clip holder.
- MCE 5.14S** Same as the MCE 5.14, but with ON/OFF switch.

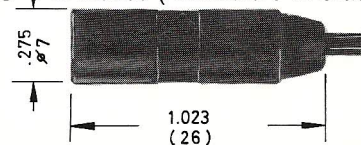
SPECIFICATIONS

| Model | MCE 5, MCE 5.3 | MCE 5.4, MCE 5.6 | MCE 5.1, MCE 5.11 | MCE 5.5 |
|--|--|-----------------------|---|-----------------------------------|
| Operating principle | electret condenser | electret condenser | electret condenser | electret condenser |
| Polar pattern | omnidirectional | omnidirectional | omnidirectional | omnidirectional |
| Frequency response | 20-20.000 Hz | 20-20.000 Hz | 20-20.000 Hz | 20-20.000 Hz |
| Sensitivity at 1 kHz | 7 mV/Pa | 14 mV/Pa | 14 mV/Pa | 7 mV/Pa |
| Output level (0dBm $\hat{=}$ 1mW/Pa) | -48 dBm | -36 dBm | -36 dBm | -50 dBm |
| EIA sensitivity rating | -141 dBm | -129 dBm | -129 dBm | -147 dBm |
| Nominal impedance | 800 ohms | 200 ohms | 200 ohms | ≤ 1.3 kohms |
| Load impedance | ≥ 3000 ohms | ≥ 1000 ohms | ≥ 1000 ohms | |
| Signal to noise ratio | 61 dB | 61 dB | 61 dB | 61 dB |
| Max. SPL. at 1 kHz and THD $\leq 1\%$ | 116 dB | 117 dB | 117 dB | 116 dB |
| Operating voltage | 9 volts | 9 volts | 5,6 volts | 5 volts |
| Current consumption | 1,3 mA | 2,7 mA | 1,8 mA | ≤ 2 mA |
| Operating time (with battery power supply MES5) | approx. 90 h | approx. 40 h | approx. 60 h | |
| Case | brass | brass | brass | brass |
| Case finish | black chromium plated | black chromium plated | black chromium plated | black chromium plated |
| Cable length | 1,3 m | 1,3 m | 3 m | 1,3 m |
| Connector | 6 pin male DIN connector | see wiring Diagram | 2-conductor Jack 6.35 mm, resp. 3 pin XLR plug, built-in battery | special connector for Nagra SN |
| Dimensions | length 23 mm, diameter without windscreen 7 mm, diameter with windscreen 10.6 mm | | | |
| Weight | 6.5 g with clip-on clasp and windscreen (w/o.cable and connector) | | | |

FURNISHED ACCESSORIES

- WS 5** removable wire-mesh windscreen
- ZWS 5** polyurethane foam windscreen
- MHV 5** belt carrier-clip for the power supply found on the MCE 5.11 N(C) only
- MKV 5/1** tie-clip holder
- Leatherette storage case

DIMENSIONS



MCE 6 DESCRIPTION

The MCE 6 is a miniature, high output omnidirectional condenser microphone capable of accurately reproducing signals generating very high sound pressure levels. The MCE 6 is specifically designed for "close miking" of musical instruments where sound pressure levels may exceed 146 dB without exhibiting overload or distortion. A complete array of precision engineered accessories are available for interfacing the MCE 6 with a variety of acoustic, brass and stringed instruments. Its small size and minimal profile is visually unobtrusive and will not hamper a musician's performance when the microphone is placed on, or inside the musical instrument. The MCE 6's wide range frequency response insures startlingly accurate acoustical pick-up of the instrument's tonal character and harmonics without any coloration.

APPLICATIONS

The MCE 6 is sensitive enough to capture the rich subtle character and intricate harmonics of the cello, violin, upright acoustic bass, acoustic guitar and flute while also able to accurately reproduce sound pressure levels in excess of 146 dB when mounted within the bell of a saxophone, french horn, trumpet, tuba or trombone. When used with a wireless body-pack transmitter the MCE 6 can provide significantly increased stage mobility during live performances.

FEATURES

- High sound pressure level capability without overload or distortion
- Good gain before feedback
- Wide range frequency response for accurate musical instrument reproduction
- Easily interfaces with wireless pocket transmitters
- Extremely small size
- Non-glare black anodized finish
- Wide array of instrument mounting accessories available
- Battery or phantom powerable

FREQUENCY RESPONSE CURVE Identical to MCE 5

MODELS

- MCE 6 The same microphone as the MCE 5 but specifically designed to handle very high sound pressure levels up to 146 dB. Supplied with a 4' cable, WS 5 windscreen, ZWS 5 foam windscreen and MKV 5/1 tie-clip holder.
- MCE 6.1N(K) Same as the MCE 6 terminating in a 2 conductor 1/4" phone connector. The connector incorporates the power supply operable by a 5.6 volt battery (supplied). Supplied with a 10' cable, WS 5 windscreen, ZWS 5 foam windscreen and MKV 5/1 tie-clip holder.
- MCE 6.9 Same as the MCE 6 terminated open-ended for use with any wireless transmitter (when interfaced with the proper connector). Supplied with a 10' cable.
- MCE 6.11N(C) Same as the MCE 6 terminating in a 3 pin XLR connector. The connector incorporates the power supply operable by a 5.6 Volt battery (supplied) or any 12-48 volt phantom power supply. Supplied with a 10' cable, WS 5 windscreen, ZWS 5 foam windscreen, MHV 5 belt carrier-clip for the power supply and MKV 5/1 tie-clip holder.

SPECIFICATIONS

Compared with the MCE 5 the sensitivity of the MCE 6 cartridge is reduced by appr. 30 dB. So the max. SPL handling capacity is increased by the same amount.

FURNISHED ACCESSORIES

see MCE 5

DIMENSIONS

see MCE 5

SPECIAL ACCESSORIES

MA 5 T 12 N (CF)

Adapter for connecting the clip-on-microphone MCE 5.4 to Nagra and Stellavox tape recorders. For 12V "AB" powering. With XLR female connector on equipment side. On special request also available with male XLR connector (MA 5 T 12 N (CM)).



MA 5 P 48 N (CF)

Adapter for connecting the clip-on-microphone MCE 5/MCE 5.3/MCE 5.4 to 48V phantom supplies. Cannon female XLR connector on equipment side. On special request also available with male XLR-connector (MA 5 P 48 N (CM)).



MCE 10 DESCRIPTION

The MCE 10 is a durable miniature hypercardioid, unidirectional microphone with very high sensitivity and excellent gain before feedback. Its wide range frequency response is designed to accurately reproduce speech, vocal or musical instruments in broadcast, recording and critical sound reinforcement applications whether they be in the studio, on the stage or in-field productions.

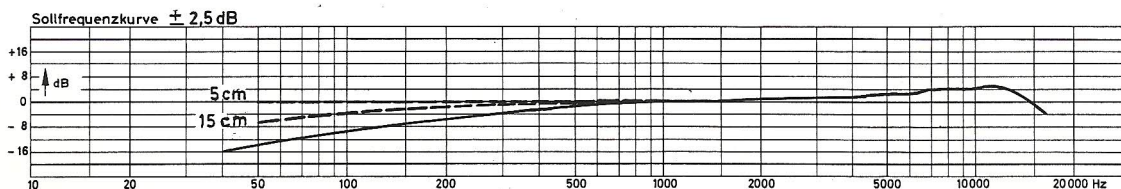
APPLICATIONS

The MCE 10's hypercardioid polar pattern, high sensitivity, wide frequency response and extremely small size make it one of the most versatile microphones available. The small size and hypercardioid polar pattern are intended for lavalier and sound reinforcement applications where high sensitivity and isolation from other sound sources are desired. The MCE 10 is especially effective in theater sound applications as an overhead or "plant" microphone. The MCE 10 can also be mounted to musical instruments (with optional adapters or suspension mount) for critical recording and live sound reinforcement. Its high sensitivity and unobtrusive design also makes the MCE 10 a superb choice for choir reinforcement applications.

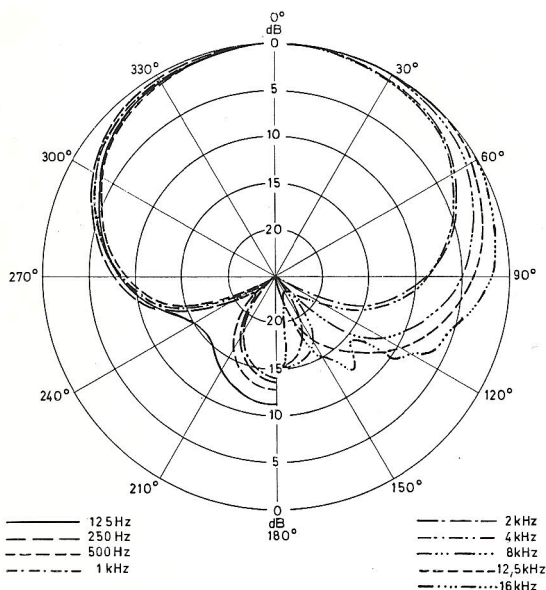
FEATURES

- **Hypercardioid polar response provides excellent gain before feedback.**
- **High sensitivity captures even the subtlest of signal sources**
- **Wide range frequency response**
- **Extremely small size for a directional microphone**
- **Non-glare black anodized finish**
- **Battery or phantom powerable**
- **Easily interfaces with wireless body-pack transmitters**
- **Lavalier or instrument mounting capabilities.**

FREQUENCY RESPONSE CURVE (± 2.5 dB)



POLAR PATTERN



This polar pattern and frequency response curve correspond to typical machine run specifications from a standard MCE 10

SPECIFICATIONS

| | |
|---|---|
| Transducer type: | Electrostatic |
| Operating principle: | Pressure gradient |
| Frequency response: | 40-20000 Hz |
| Polar pattern: | Hypercardioid |
| Attenuation at 120° (1 kHz): | > 20dB |
| Open circuit voltage at 1 kHz: (0 dBV $\hat{=}$ 1V/Pa) | 8mV/Pa $\hat{=}$ -42 dBV |
| Nominal impedance | 700 Ω |
| Load impedance: | \geq 2700 Ω |
| Max. SPL at 1kHz and THD \leq 1%: | 116 dB |
| Signal-to-noise ratio rel. to 1Pa.: | appr. 61 dB |
| A-weighted equivalent SPL: | 26 dB |
| Supply voltage: | 8V-18V |
| Current consumption: | approx. 1.4 mA at 9 V |
| Case: | Brass |
| Case finish: | matte black |
| Male connector: | according to models (refer to MCE 5/6) |
| Net weight (less cable): | 15 grams |

MODELS

- MCE 10** Condenser, hypercardioid, clip-on lavalier microphone, 9 mm diameter and 30 mm long. Matte black anodized, non-glare finish designed for theater musicals, live TV productions and church installations. The MCE 10 ist designed to be used when feedback problems exist from simultaneous sound sources. Terminated in a 6 pin DIN connector which interfaces with the MES 5 VN(C) power supply. Supplied with 4' cable, WS 10 wire mesh windscreen, ZWS 10 foam windscreen and MKV 10/1 tie-clip holder.
- MCE 10.1N(K)** Same as the MCE 10 terminating in a 2 conductor 1/4" phone connector. The connector incorporates the power supply operable by a 5.6 Volt battery (supplied). Supplied with a 10' cable, WS 10 wire mesh windscreen, ZWS 10 foam windscreen and MKV 10/1 tie-clip holder.
- MCE 10.9** Same as the MCE 10 terminated open-ended for use with any wireless transmitter (when interfaced with the appropriate connector), supplied with a 10' cable, WS 10 wire mesh windscreen, ZWS 10 foam windscreen and MKV 10/1 tie-clip holder.
- MCE 10.11(C)** Same as the MCE 10 terminating in a 3 pin XLR-connector. The connector incorporates the power supply operable by a 5.6 Volt battery (supplied) or any 12-48 Volt phantom power supply. Supplied with a 10' cable, WS 10 wire mesh windscreen, ZWS 10 foam windscreen, MHV 5 belt carrier-clip for the power supply and MKV 10/1 tie-clip holder.
- MCE 10.14** Same as the MCE 10.9 terminating in a 4 pin miniature connector for direct interface with beyerdynamic wireless transmitters TS 42, 10-10...30 and TS 185. Supplied with a 4' cable, WS 10 windscreen, ZWS 10 foam windscreen and MKV 10/1 tie-clip holder.
- MCE 10.14 S** Same as the MCE 10.14 but with ON/OFF switch.

SPECIAL MODELS

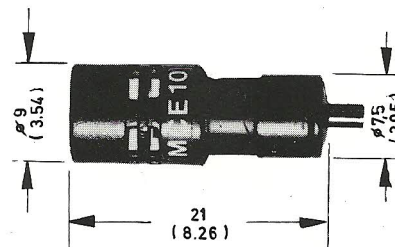
- SHM 10/300N(C)** The MCE 10 mounted on a gooseneck, 8 mm diam., 300 mm long, with 5/8" thread and 4' cable terminating in a 3 pin XLR connector. Operable by any phantom power supply between 12 and 48 Volt
- SHM 10/500N(C)** Same as the SHM 10/300, but gooseneck 500 mm long

FURNISHED ACCESSORIES

- WS 10** removable wire mesh windscreen
- ZWS 10** polyurethane foam windscreen
- MKV 10/1** tie/lapel clip holder for one MCE 10. The clip rotates for better microphone directionality
- MHV 5** belt carrier-clip for the power supply found on the MCE 10.11 N(C) only.
- Leatherette storage case

DIMENSION

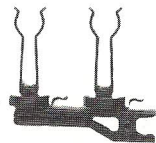
in millimeters(Inches in brackets)



SHM 10

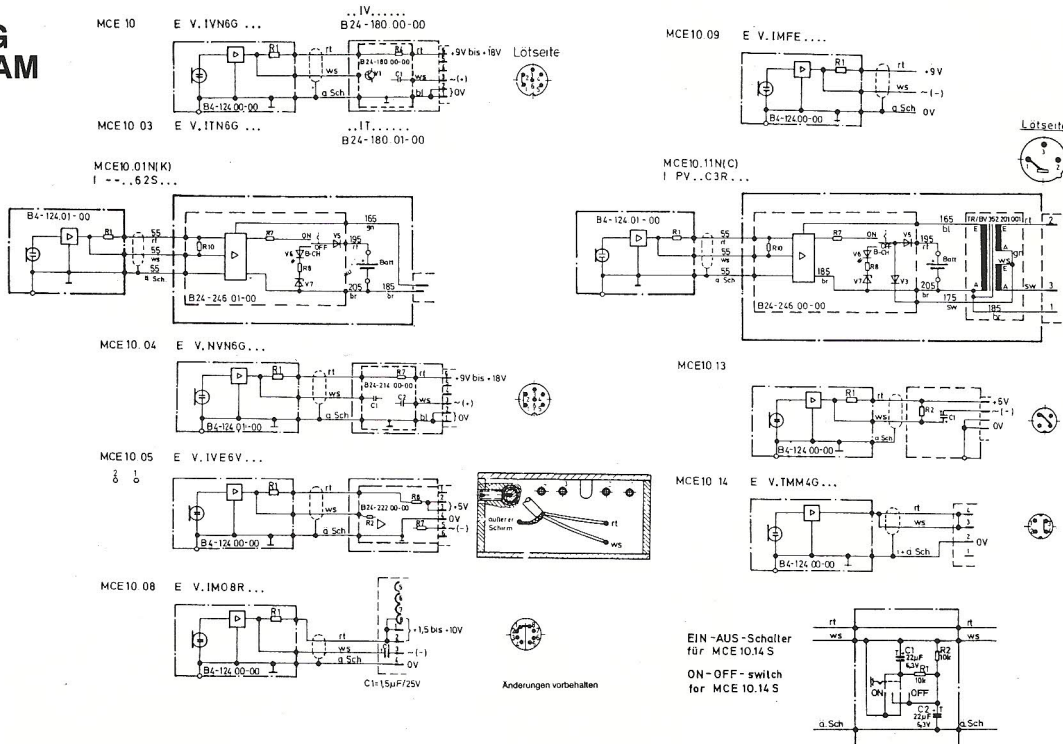
OPTIONAL ACCESSORIES

- MKV 10/2** tie/lapel clip holder for two MCE 10. The clip rotates for better microphone directionality.



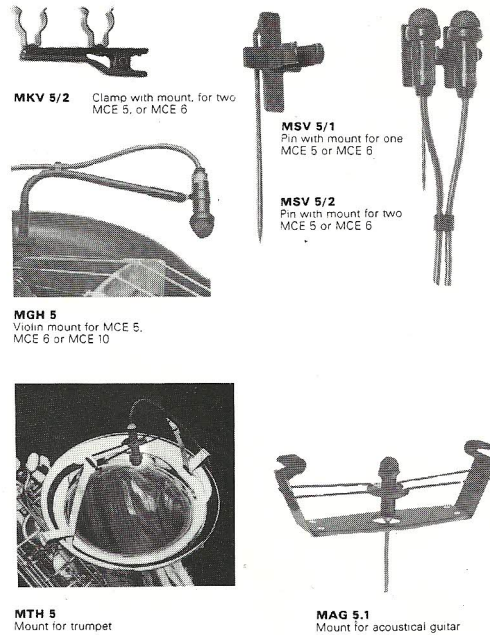
Same as the MCE 5 optional accessories.

WIRING DIAGRAM



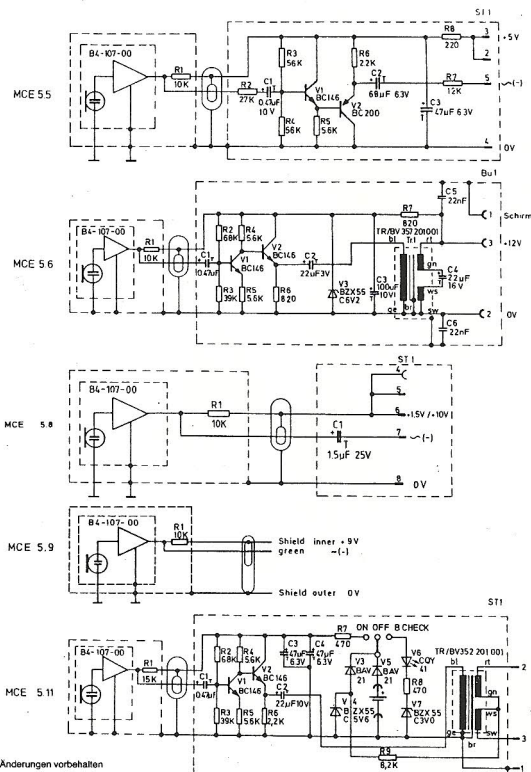
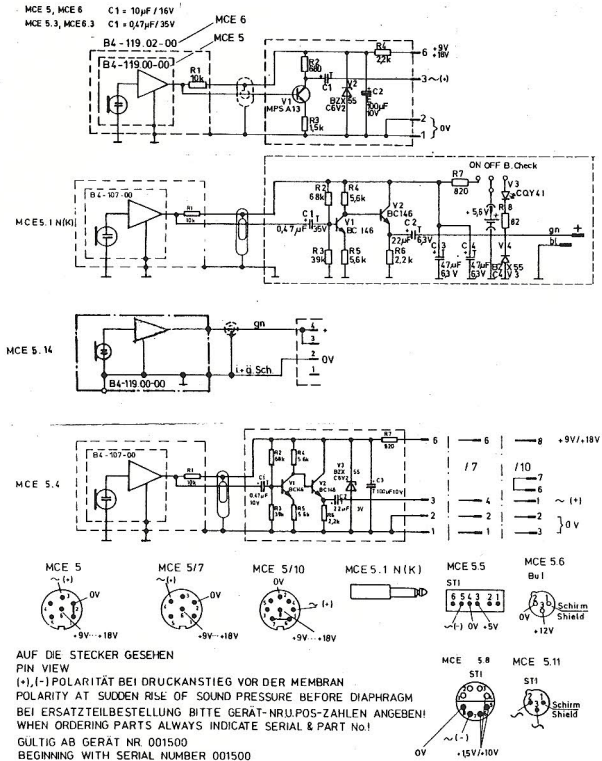
OPTIONAL ACCESSORIES for MCE 5, MCE 6 or MCE 10

- MKV 5/1D Similar tie-clip to the MKV 5/1 except that the mic can be rotated on tie-clip for better microphone directionality
- MKV 5/2 Tie/Lapel clip designed to hold two MCE 5 or MCE 6
- MSV 5/1 Stick pin holder for one MCE 5, MCE 6 or MCE 10
- MSV 5/2 Stick pin holder for two MCE 5, MCE 6 or MCE 10
- MAG 5.1 Acoustic guitar clip for MCE 5, MCE 6 or MCE 10
- MGH 5 Violin, viola or cello mount for MCE 5, MCE 6 or MCE 10
- MFH 5 Flute mount for the MCE 5, MCE 6 or MCE 10
- MTH 5 Trumpet, saxophone or trombone suspension mount for the MCE 5, MCE 6 or MCE 10
- MES 5 VN(C) Battery operated power supply (9 volt) for the MCE 5, MCE 6 and MCE 10. 6 pin DIN input and 3 pin XLR output. The MES 5 VN(C) can also be used as a pre-amp adapter for any 48volt phantom power supply. Features include ON/OFF switch and battery condition led. Supplied with ZHV 5 belt carrier-clip.



WIRING DIAGRAM FOR MCE 5, MCE 6

ELEKTRET KONDENSATOR ANSTECKMIKROFON MCE 5
CLIP-ON ELECTRET CONDENSER MICROPHONE MCE 5



Subject to change without notice.

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