

# DT 790

Headset with dynamic microphone  
for use in loud environments



## FEATURES

- Excellent ambient noise attenuation
- High-quality dynamic hypercardioid microphone with very high gain-before-feedback
- Pivotal, flexible gooseneck for optimal positioning with shock-mounted microphone
- Robust, serviceable design as all parts are replaceable
- Single-sided connecting cable
- Closed headphone
- Rugged headband construction
- Adjustable, soft padded headband
- Circumaural leatherette ear pads

## DESCRIPTION

The DT 790 headset is a perfect combination of the closed DT 770 M headphone, the high-quality microphone of the DT 290 headset and a new, pivoting gooseneck microphone boom. This headset has been developed for intercom purposes in very loud surroundings such as concerts, sporting events etc., where ambient noise attenuation, durability and comfort are of utmost importance.

The powerful headphone systems with a frequency response of 5 – 30.000 Hz provide a perfect reproduction and a balanced sound characteristic. The noise attenuating housing and the soft, circumaural leatherette ear pads provide an excellent isolation from ambient noise. The new, pivoting gooseneck microphone boom can be set into any required position so that the microphone can be used from the right or left hand side. When not in use, the microphone can be turned to the upper position. The dynamic hypercardioid microphone ensures an extremely high gain-before-feedback and noise cancellation. In order to avoid damages, the cables in the headband and gooseneck boom are covered. The single-sided cable is available with different connectors allowing all required connections.

## VERSIONS

DT 790.00	80 Ω, 1.5 m cable, bare ended . . . . .	Order # 488.747
DT 790.28	80 Ω, 1.5 m cable, 4-pin female XLR connector . .	Order # 488.755

## TECHNICAL SPECIFICATIONS

### Headphone

Transducer type . . . . .	Dynamic
Operating principle . . . . .	Closed
Frequency response . . . . .	5 – 35,000 Hz
Nominal impedance . . . . .	80 Ω / system
Nominal input voltage . . . . .	2.8 V (= 100 mW at 80 Ω) = 120 dB SPL
Nominal sound pressure level at 1 kHz . .	100 dB SPL at 1 mW = 0.28 V at 80 Ω
T.H.D. . . . .	< 0.2%
Power handling capacity . . . . .	100 mW = 120 dB = 2.8 V at 80 Ω
Ambient noise attenuation . . . . .	approx. 35 dBA
Average pressure on ears . . . . .	5.5 N
Weight without cable . . . . .	470 g

### Microphone

Transducer type . . . . .	Dynamic
Frequency response . . . . .	40 – 12,000 Hz
Polar pattern . . . . .	Hypercardioid
Output voltage at a distance of 5 cm . . . . .	approx. 3 mV approx. 1.5 V
Nominal impedance . . . . .	200 Ω
Nominal load impedance . . . . .	≥ 1000 Ω
Weight . . . . .	40 g

# DT 797

Headset with condenser microphone  
for use in loud environments

Order # 497.894



## FEATURES

- Excellent ambient noise attenuation
- High-quality cardioid condenser microphone for improved bass response and with high gain-before-feedback
- Very high speech reproduction quality and excellent intelligibility
- Pivotable, flexible gooseneck for optimal positioning with shock-mounted microphone
- Robust, serviceable design as all parts are replaceable
- Single-sided connecting cable
- Closed headphone
- Rugged headband construction
- Adjustable, soft padded headband
- Circumaural leatherette ear pads

## DESCRIPTION

The DT 797 is a perfect combination of the closed DT 770 M headphone, the high-quality condenser microphone of the DT 297 headset and a new, pivoting gooseneck microphone boom. This headset has been developed especially for live performances in very loud surroundings such as sporting events etc., where ambient noise attenuation, durability and comfort are of utmost importance. The powerful headphone systems with a frequency response of 5 – 30,000 Hz provide a perfect reproduction and a balanced sound characteristic. The noise attenuating housing and the soft, circumaural leatherette ear pads provide an excellent isolation from ambient noise. The new, pivoting gooseneck microphone boom can be set into any required position so that the microphone can be used from the right or left hand side. When not in use, the microphone can be turned to the upper position. The condenser microphone is provided with a larger capsule with improved bass response. The cardioid polar pattern ensures a high gain-before-feedback and noise cancellation. In order to avoid damages, the cables in the headband and gooseneck boom are covered. The single-sided cable provides a 1/4" stereo jack (6.35 mm) and a 3-pin male XLR connector.

## TECHNICAL SPECIFICATIONS

### Headphone

Transducer type	Dynamic
Operating principle	Closed
Frequency response	5 – 35,000 Hz
Nominal impedance	250 Ω / system
Nominal input voltage	2.8 V (= 100 mW at 250 Ω) = 120 dB SPL
Nominal sound pressure level at 1 kHz	100 dB
T.H.D.	< 0.2%
Ambient noise attenuation	approx. 35 dBA
Average pressure on ears	4.5 N
Connector	1/4" stereo jack (6.35 mm)
Weight without cable	395 g

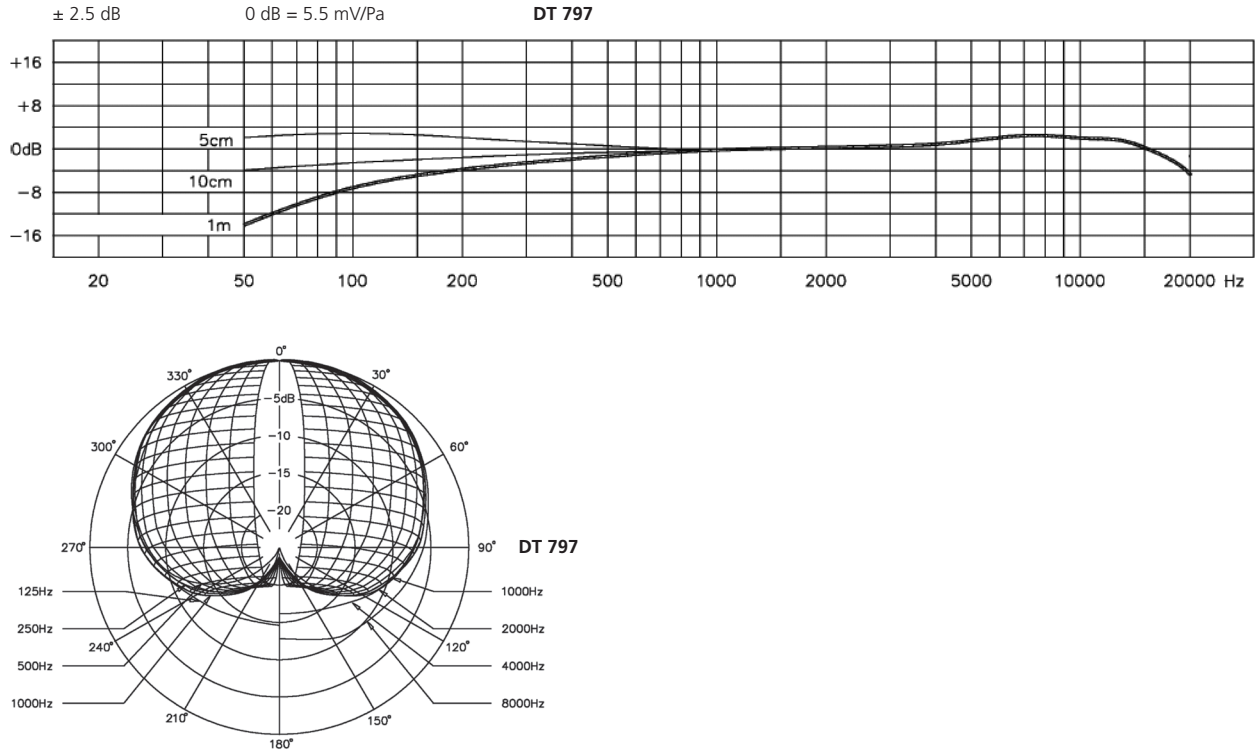
### Microphone

Transducer type	Condenser (back electret)
Frequency response	40 – 20,000 Hz
Polar pattern	Cardioid
Output voltage at a distance of 5 cm	5.5 mV/Pa
Nominal impedance	300 Ω
Nominal output impedance	≥ 1000 Ω
Open circuit voltage	5 mV/Pa at f = 1 kHz
Max. SPL	136 dB
S/N ratio	64 dB
Current consumption	< 6 mA
Phantom supply	12 – 48 V
Connector	3-pin XLR male
Dimensions	
Gooseneck length	120 mm
Capsule diameter	19 mm
Weight	30 g

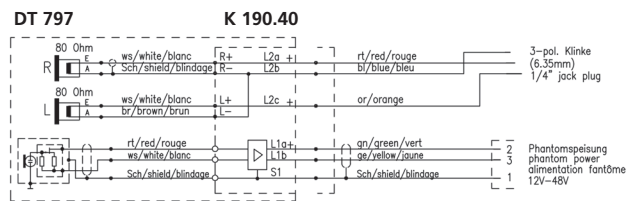
# DT 797

## FREQUENCY RESPONSE & POLAR PATTERN

This frequency response curve (measuring tolerance  $\pm 2.5$  dB) and polar pattern correspond to a typical production sample for the microphone of this headset.



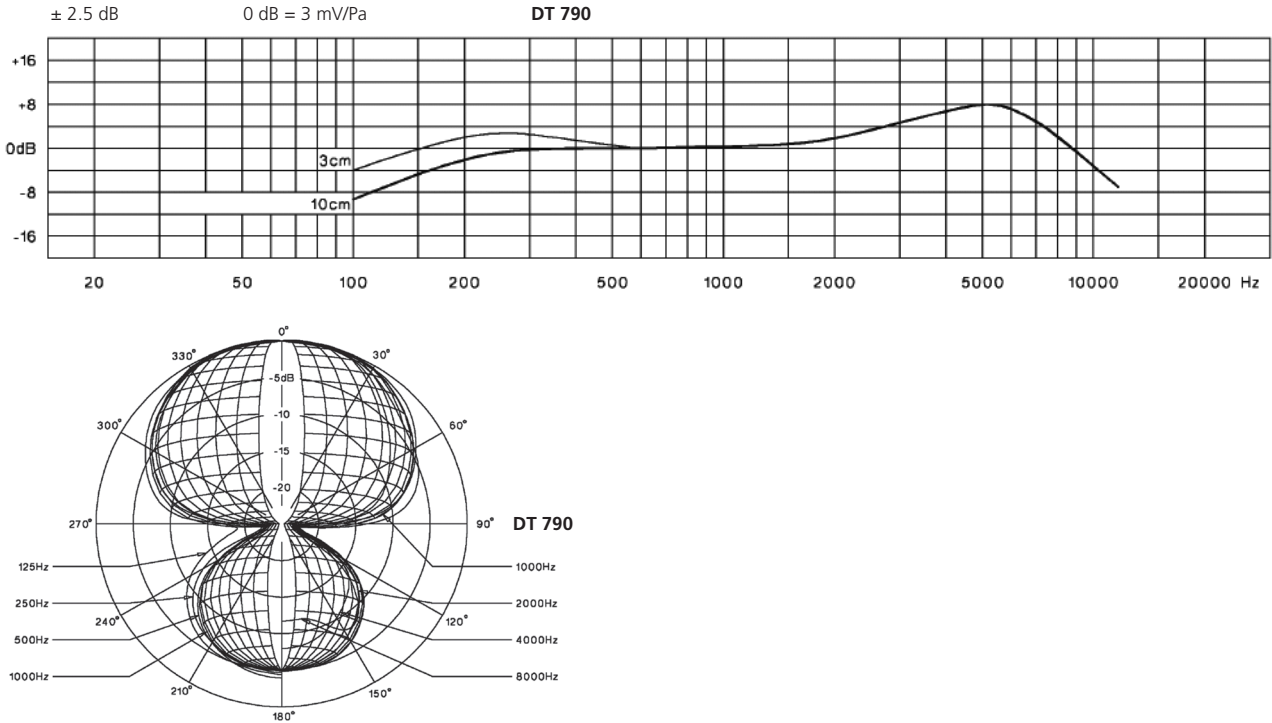
## WIRING DIAGRAM



# DT 790

## FREQUENCY RESPONSE & POLAR PATTERN

This frequency response curve (measuring tolerance  $\pm 2.5$  dB) and polar pattern correspond to a typical production sample for the microphone of this headset.



## WIRING DIAGRAMS

