IBANEZ NEW TECH II MICROPHONES

Ibanez is proud to introduce the new TECH II series microphones. Years of research and development have led to major improvements in traditional microphone design. The TH series has developed from the previous TM series and many improvements have been made. Two new models have also been added to round out the line with 7 microphone models.

The two new models are the TH500 and the TH600. The TH600 is a high quality microphone that is surprisingly low in price and the TH500 is the "professional choice" for stage and studio work.

New cartridges with lightweight aluminum voice coil achieve a very high sound quality and the TH500 has a high output. High quality sound without distortion. Hand held noise has been virtually eliminated due to our breakthrough in shock mounting.

Try the new "TH series" microphones today. There is one for every application and budget.

Make the right choice!

Microphone specifications can offer a vast range of results, however, a basic understanding of some of the characteristics of microphones will aid in making the best choice.

Types of Microphones

Nearly all microphones currently being used in studio and sound reinforcement applications fall into two types - dynamic and condenser.

A dynamic microphone is basically a small loudspeaker that works in reverse. Sound energy moves a diaphragm. This diaphragm is connected to a voice coil which moves in a magnetic field, creating an electrical signal equivalent of the sound source. The TH600 and TH500 are examples of this type. Dynamic microphones are rugged, durable, and less likely to suffer damage. They are frequently used in high volume settings where condenser microphones could suffer.

A condenser microphone is constructed of a thin diaphragm, backfed with a battery, excited by an electrical grid or screen. These screens are clamped with a voice coil which is then connected to a transformer, amplifier, and output circuit. Condenser microphones are often used in higher volume settings where they can be protected from damage. Condenser microphones often have a "bump" in the midrange, which is sometimes undesirable.

Condenser microphones are more susceptible to overloading and feedback. The TH600 and TH500 are designed with a "bump" in the midrange, which is sometimes desirable.

Dynamic vs. Condenser

By controlling the specifications of a dynamic cartridge, various tonal characteristics can be generated in the TH600. "Hot" TH600's are more suitable for live applications where the performer is close to the microphone. "Cool" TH600's are more suitable for studio applications where the performer is further away. This makes the TH600 an excellent choice for live applications.

Directional Characteristics

By nature of their construction, microphones have different directional response characteristics. Dynamic and condenser microphones are "broadside" omnidirectional. That is to say, they pick up sound equally well from any angle.

Comparison of microphones exhibit what is known as a "cardiod" pattern response pattern. Microphones with a cardiod pattern are very sensitive to sounds from the front of the microphone, moderately sensitive to sounds from the sides, and insensitive to sounds from the back. Cardiod microphones are very effective in situations where close-miking is required. Cardiod pattern microphones have excellent anti-feedback characteristics.

Ibanez Tech II microphones are designed with a cardiod pattern for the lower frequency range and an "supercardiod" pattern for the higher frequencies. This means that the microphone will become less sensitive to feedback as the frequency rises.

Proximity and Other Effects

The lack proximity effect refers to an increase in the level of response of some microphones as they are moved closer to the sound source. This effect is particularly desirable for vocals, allowing them to be further away from the microphone by moving closer to the sound source. TH600, TH500, TH300, TH200 and TH100 microphones have a smooth, uniform effect that is very easy for the vocalist to control.

Another important characteristic of microphones is transient response, the ability of the microphone to record accurately to changes, such as drum and piano sounds. The TH600, TH500, TH300, TH200 and TH100 microphones have a smooth, uniform effect that is very easy for the vocalist to control.

Aimed with the basic information you have just read, Ibanez microphones specifications like a precision tool for nearly any application in the Ibanez TECH II line.
TH 100
Dynamic • Cardioid
Low Impedance

The TH100 microphone is a high quality microphone with a supercardioid low piece. Due to its superior cartridge design and built-in popfilter, it yields a wide dynamic range from soft to loud. The TH100 is housed in a rugged zinc die-cast casing that provides a balanced weight and feel for the performer.

1. Sound Filter: This specially designed pop filter reduces extraneous breath "pops" and sharp noises, while the mesh screen protects the cartridge from impact damage.
2. Wide Slot: New slotted technique has led to the development of a new voice coil that yields a crisp, clear sound, even at high sound pressure levels.
3. On/Off Switch: The on/off switch provides instant control, right at your finger tips.
4. Body: The heavy duty zinc die-cast casing provides a balanced feel, isolated from unwanted hand held noise.

Recommended Applications:

TH 300
Dynamic • Cardioid
Low Impedance

The TH300 is a sleek looking microphone with a balanced feel. It features a zinc die-cast housing and heavy meshed screen for the ultimate in rugged protection. The cartridge utilizes a light-weight aluminum voice coil and built-in pop filter, with a smooth proximity effect and mid-high boost for exceptional clarity. The cartridge is shock mounted in the housing to reduce handling noise while a locking on/off switch prevents accidental turn off during a performance.

Recommended Applications:

SPECIFICATIONS

Polar Pattern: Cardioid (unidirectional)

SPECIFICATIONS

Polar Pattern: Unidirectional (Cardioid)

Frequency Response

Frequency Response

Impedance

Impedance

Output Level

Output Level

Contact Wire

Contact Wire

Contact Wire

Dimensions

Dimensions

Weight

Weight

270 ohms

250 ohms

77.5 dB

77.5 dB

45 x 150 mm

45 x 150 mm

315 g (Body)

315 g (Body)
TH 350
Dynamic - Cardioid
Dual-Impedance
[High & Low]

For those who need a high impedance microphone or occasionally need a low impedance mic, then the TH350 is the way to go. Changing the impedance from 60 ohms to 250 ohms is a simple procedure and easy step by step instructions are included. A specially designed transformer provides sonic excellence even in the high impedance mode.

1. Top Case: This heavy duty, rugged mesh screen protects the cartridge from damage if the mic is accidentally dropped.
2. Sound Filter: The sound filter uses a special density foam to filter out excessive breath puffs and wind noises without altering the original sound.
3. Shock Mount: The die-cast coupling and foam specifically placed 3/4" rings with a rubber pad surrounded by metal secure the cartridge, to reduce vibrations and handling noise.
4. Parts: These internal parts are mounted inside the grip without any external screws, keeping the mic looking and feeling great.

On/Off Switch: A positive locking on/off switch can be locked in the "On" position safely, with the use of a screwdriver or even a coin. This prevents accidental operation during a performance.

Impedance Selector: Since there is a dual impedance transformer mounted in the mic, you can select between high or low impedance by simply changing the position of the pin sockets at the connector base.

Recommended Applications:

**Frequency Response**

Polar Pattern: Cardioid (unidirectional)

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TH 500
Dynamic - Cardioid
Low Impedance

The Beyer TH500 is the professional choice in microphones for studio recording or concert sound. The TH500 utilizes a newly developed cartridge with a high compliance diaphragm and double dome voice coil to withstand high SPL yet still deliver clean full lows. This makes it a flat frequency response close to 40 Hz. The cartridge is shock mounted to prevent handling noise and is housed in an aluminum rugged casing to provide years of trouble free operation.

1. Top Case: This thick mesh grill with built-in support makes the whole top of mic rugged enough for even the heaviest tour.
2. Sound Filter: Special density foam filter reduces unwanted breath noises while protecting the cartridge from humidity.
3. Cartridge Design: The TH500 utilizes a newly developed cartridge with a high compliance edge and double dome voice coil to withstand high SPL yet still deliver clean, full lows.
4. Cartridge: Our long term experience in circuit design and the best grade components yield a cartridge that shows smooth frequency response from highs to lows.
5. Shock Mounting: The cartridge is shock mounted by two "O" rings and a rubber coil between the metal surfaces to greatly reduce vibrations and handling noise.
6. Transformer: An efficient transformer increases the output of the moving coil which yields a higher sensitivity for this microphone.
7. Body: The heavy duty case die-cast casing is rugged yet shaped for a comfortable and natural hand hold feel.

**Frequency Response**

Polar Pattern: Cardioid (unidirectional)
**TH 700**

**Dynamic • Cardioid • Low Impedance**

This microphone was designed for fast transient response with low distortion. An ultra light weight aluminum voice coil provides a full sound with excellent brilliance and clarity. The zinc die-cast case is rugged enough for even the heaviest tour use. The TH700 gives clean and accurate reproduction of even the most critical sound such as vocals, toms or piano. A locking on/off switch prevents accidental turn off during a performance.

1. **Top Case**: A rugged but stylish die-cast cover protects the cartridge and a turn pop filter prevents inverted breath sounds while keeping the cartridge dry as well.
2. **Cartridge Diaphragm**: This cartridge diaphragm uses an ultra lightweight beryllium voice coil for lightning fast transient response without distortion.
3. **On/Off Switch**: A positive locking, on/off switch can be locked in the "off" position to prevent accidental operation during a performance. The switch is recessed to ensure that the mic has a smooth look.
4. **Shock Mount**: The die-cast, "U" rings, and a rubber pad sandwiched between the metal parts keep handling noise to a minimum.
5. **Body**: The zinc die-cast body is rugged enough for even the heaviest touring or studio use. This mic has a smooth contour which fits neatly in your hand or the supplied mic holder.

**Recommended Applications**:

**Frequency Response**

**Polar Pattern**: Cardioid (unidirectional)

**SPECIFICATIONS**

- **Polar Pattern**: Uni-Directional (Cardioid)
- **Impedance**: 250 ohms
- **Output Level**: 77 dB
- **Cardinal Color**: Tan/Black
- **Finish Color**: Black, Blue
- **Dimensions**: 4.50 x 160 mm
- **Weight**: 100 g (3.5 oz)

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**TH 500**

**Dynamic • Cardioid • Low Impedance**

This instrument is the professional choice in microphones. For studio recording or concert sound reinforcement, the TH500 truly stands alone. Designed specifically for low frequency drums such as bass drum and floor toms, the TH500 also works well with low brass and bass guitar. The features TH500 has all of the features that make up a truly professional microphone, and then some. It's a clear natural sound has destroyed the TH200 to become one of the classic microphones of all time.

1. **Top Case**: Good looks, all round, durability and a maximum open space describe the TH500's top casing. The internal silk screen mesh and sound filter are perfectly matched to this mic's powerful cartridge.
2. **Cartridge Screen**: A heavy mesh grill with an internal screen prevents the mics from shorting. The tube used here is the same one used in the TH200. The tube is a vacuum tube, which protects the diaphragm from overheating.
3. **Cartridge Diaphragm**: The cartridge diaphragm features a double diaphragm that captures low frequencies like vocals and exhausts high frequencies (like strings) as well.
4. **Cartridge**: A wide frequency response (600-20,000 Hz) and a newly designed high-power vacuum tube (6J7GT) creates a surprisingly high output for a low-impedance microphone.
5. **Shock Mount**: "U" ring shock mount is on a unique tube. To keep the housing free from vibration, the cartridge from handling noise and floor vibrations.
6. **Low Cut Filter**: A recessed position low cut filter lets you select the bass response for a variety of applications.
7. **Adjuster/Holder**: This new "loon" shock mount is an adjustable holder for the mic. It eliminates the need for troublesome plastic mic holders, and allows you to position the mic without fear of damage.

**Recommended Applications**:

**Frequency Response**

**Polar Pattern**: Cardioid (unidirectional)

**SPECIFICATIONS**

- **Polar Pattern**: Uni-Directional (Cardioid)
- **Impedance**: 200 ohms
- **Output Level**: 80 dB
- **Cardinal Color**: Black, Blue
- **Finish Color**: Black, Blue, Brown
- **Dimensions**: 4.50 x 160 mm
- **Weight**: 110 g (4 oz)
TH 900
Condenser Cardioid Low Impedance

The TH900 is a back-electret, unidirectional condenser microphone. It features a flat frequency response over the entire audio range with response to 20 kHz. A built-in low cut filter and excellent transient response makes this suitable for all instruments, particularly high-hat, cymbals and strings.

1. Case: Zinc and brass top casing combine with mesh screen and sound filter for smooth tone and a compact performance.
2. Cartridge Diaphragm: The diaphragm is made from a high-molecular film with rigid frame for realizing the same high performance you expect right after right. This feature makes it a stable and reliable back element microphone.
3. Cartridge: This cartridge is designed with a light cardioid polar pattern at all frequencies.
4. Power Supply: A fresh battery for a source enables this mic to handle an extremely high SPL, with low distortion, and an amazing wide dynamic range. The 9 volt battery also has a much longer life than other battery voltage batteries.
5. Low Cut Switch: This switch controls the bass response for varied usage. For vocals to delicate instruments, the response requires smoothly.
6. Parts: All internal parts are fixed to one chassis and attached to the gip with one screw, for ease in repairing.

Recommended Applications:

Frequency Response

Polar Pattern: Cardioid (unidirectional)

SPECIFICATIONS

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<thead>
<tr>
<th>Polar Pattern</th>
<th>Unidirectional (Cardioid)</th>
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<tbody>
<tr>
<td>Impedance</td>
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<td>Dimensions</td>
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<td>Weight</td>
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WIRESCREENS
File models TH900, TH1000. 1. 4613-BK (Black) 2. 4613-GR (Green) 3. 4613-GR (Green) 4. 4613-GR (Orange)

MICROPHONE CABLES
Unbalanced type
16. TH-90 (Red) 17. THC-90 (Black) 18. THC-90 (Red) 19. THC-90 (Blue)

Input Connector: Three pin audio connector (L/A-3/10) Output Connector: 3/4 standard phone plug Length: 5 m Conductor: 2 Balanced type
16. THC-90 (Black) 17. THC-90 (Red) 18. THC-90 (Blue)

Input Connector: Remote professional three pin audio input connector Output Connector: Male 3/4 standard phone plug

MICROPHONE HOLDERS
24. MV2 Multimode Type 25. MV8 Universal Type

STAND ADAPTOR
26. SAD

IMPEDANCE MATCHING LINE TRANSFORMER

23. MT-7 Input Impedance: 600 ohms Balanced Output Impedance: 100 ohms and 600 ohms Unbalanced with switchable Input Connector: Remote professional three pin audio input connector Output Connector: Male 3/4 standard phone plug

GOOSE NECK
28. GN-15 31/8"-5/8" MICROPHONE DESK STAND
29. MDS10
TAMA MICROPHONE STANDS

Tama's high standards of engineering have been applied to mike stands with no details overlooked. Excellent stability and a smoothness of operation make them the perfect choice for the musician, P.A. company and/or recording studio. Tama's Strongman stands employ a principle used in the Tama Titan Snare stand. The rubber grip not only holds perfectly well but also acts as a sound insulator, something especially important when miking drums and other acoustic instruments.

**Boom Attachments**

Tama Boom Attachments will fit on the MS80, MS100 and MS200 straight stands. Lightweight but strong, these stands assist in filling the needs of any mike using individual.