<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TES-560X</td>
<td>Series Digital Infrared Wireless Microphone</td>
</tr>
<tr>
<td>TES-5604N_W</td>
<td>Digital Infrared Wireless Microphone (white, built-in rechargeable lithium battery, with laser pointer, excl. adapter, used with TES-5600NS_W neck lanyard or TES-5600CLP clip)</td>
</tr>
<tr>
<td>TES-5606</td>
<td>Digital Infrared Wireless Microphone (built-in rechargeable lithium battery, excl. adapter, used with TES-5600NS_W neck lanyard or TES-5600CLP clip)</td>
</tr>
<tr>
<td>TES-5607</td>
<td>Digital Infrared Wireless Microphone (used with power bank and TES-5600NS_W neck lanyard or TES-5600CLP clip, excl. power bank)</td>
</tr>
<tr>
<td>TES-1021</td>
<td>Clip Microphone</td>
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<td>TES-1022</td>
<td>Single-ear Microphone</td>
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<td>TES-1023</td>
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<tr>
<td>TES-5600MIC</td>
<td>Wired Desktop Microphone (standard stem microphone: 60cm, optional: 50/70cm)</td>
</tr>
<tr>
<td>TES-5600CSMN</td>
<td>Wired Desktop Microphone (standard stem microphone: 60cm, optional: 50/70cm; with a lockable charging station for one TES-5604 series microphone, can be unlocked via central control system or via network management system; support network management when used with TES-5604NSW Wireless Microphones Management Platform; with TES-ADP5V power adapter)</td>
</tr>
<tr>
<td>TES-5600CSML</td>
<td>Wired Desktop Microphone (standard stem microphone: 60cm, optional: 50/70cm; with a lockable charging station for one TES-5604 series microphone, can be unlocked by scanning QR code or via central control system; with TES-ADP5V power adapter)</td>
</tr>
<tr>
<td>TES-5600CSM</td>
<td>Wired Desktop Microphone (standard stem microphone: 60cm, optional: 50/70cm; with a charging station for two TES-5604 series microphones, with TES-ADP5V power adapter)</td>
</tr>
<tr>
<td>MS50EGD2B</td>
<td>Stem Microphone (50cm, built-in windshield, flexible gooseneck tube, for TES-5600 series Wired Desktop Microphone, black)</td>
</tr>
<tr>
<td>MS60EGD2B</td>
<td>Stem Microphone (60cm, built-in windshield, flexible gooseneck tube, for TES-5600 series Wired Desktop Microphone, black)</td>
</tr>
<tr>
<td>MS70EGD2B</td>
<td>Stem Microphone (70cm, built-in windshield, flexible gooseneck tube, for TES-5600 series Wired Desktop Microphone, black)</td>
</tr>
<tr>
<td>TES-5600MAU/30</td>
<td>Digital Infrared Classroom Audio System Main Unit (supports 2 wireless microphones, built-in amplifier, supports 4 speakers, can connect to TES-5600 series Wired Desktop Microphone for audio transmission, USB interface for digital audio input/output, phantom power, RJ45 interface to extend receiver, with adapter)</td>
</tr>
<tr>
<td>TES-5600BX2/30</td>
<td>Digital Infrared Classroom Audio System Control Box (with RJ45 interface, supports 2 wireless microphones, built-in audio power amplifier can be connected to 4 loudspeakers, can connect to TES-5600 series Wired Desktop Microphone for audio transmission, 2 line in, 1 line out, with TES-ADP24V adapter)</td>
</tr>
<tr>
<td>TES-5600RN/30</td>
<td>Digital Infrared Receiver (RJ45 interface, ceiling, wall or tripod-mounted, support 2 wireless microphones)</td>
</tr>
<tr>
<td>TES-568xM</td>
<td>Series Digital Infrared Classroom Audio System</td>
</tr>
<tr>
<td>TES-5685MB/30</td>
<td>Digital Infrared Classroom Audio System Main Unit (with digital infrared receiver, supports 2 wireless microphones, analog audio input/output, built-in audio power amplifier and integrated loudspeakers, RJ45 interface for extending receiver)</td>
</tr>
<tr>
<td>TES-5685MC/30</td>
<td>Digital Infrared Classroom Audio System Main Unit (with digital infrared receiver, supports 1 wireless microphone, analog audio input/output, built-in audio power amplifier and integrated loudspeakers, RJ45 interface for extending receiver)</td>
</tr>
<tr>
<td>Model</td>
<td>Description</td>
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</tr>
<tr>
<td>TES-5385MCP/30</td>
<td>Digital Infrared Classroom Audio System Main Unit (with digital infrared receiver, supports 1 wireless microphone, analog audio input/output, with built-in audio power amplifier and integrated loudspeakers, network connection for PA and network management, RJ45 interface for extending receiver)</td>
</tr>
<tr>
<td>TES-5685PA</td>
<td>Function Extension Box (for TES-5685MCP, 1 line in, 1 line PA in with loopout, 1 PA trigger)</td>
</tr>
<tr>
<td>TES-5685BX/30</td>
<td>Function Extension Box (for TES-5685M, analog audio input/output, can connect to TES-5600 series Wired Desktop Microphone for audio transmission, 1 line in + 1 line out)</td>
</tr>
<tr>
<td>TES-5685BXP/30</td>
<td>Function Extension Box (for TES-5685M series, analog audio input/output, can connect to TES-5600 series Wired Desktop Microphone for audio transmission, 1 line out+1 line in, 1 PA trigger)</td>
</tr>
</tbody>
</table>
Digital Infrared Classroom Audio Reinforcement System

System overview

TAIDEN, one of the world’s renowned suppliers of digital conference systems and simultaneous interpretation system, has equipped prestigious international institutions and high profile events including the UN headquarters in New York, Council of Europe, G20 Summits, APEC Summits, Asia-Europe Meeting, and IMF-World Bank Annual Meetings.

In 2015, TAIDEN introduced its worldwide pioneering digital infrared technology into the field of multimedia teaching and released successively a series of classroom audio systems which can be categorized as Digital IR Wireless Classroom Audio Reinforcement System, Interactive Recording and Webcasting Audio System and Lecture Recording Management Platform. The audio systems featuring excellent audio clarity, great immunity to interference and convenient management fully satisfy the need for sound reinforcement, interactive recording and webcasting, and centralized management of all the multimedia equipment in classrooms. In addition, the wireless microphone of digital IR technology provides safe and RF radiation free use. What’s more, the e-lock charging station for wireless microphones frees school AV/IT teams from keeping and charging the microphones.

System theory

The core of the TAIDEN digital infrared wireless classroom audio system – dirATC (digital infrared Audio Transmitting and Control technologies) - is a new technology originated by TAIDEN. It encodes and modulates audio and data signals digitally for transmission via infrared light, achieving both multi-channel audio signals and bidirectional data transmission and control. Digitalization and wireless transmission via infrared technology are integrated to make an ideal solution for a wireless conference system. TAIDEN’s infrared audio transmission and control technology (dirATC) is built on its processing chip by integrating A/D (analog/digital) conversion circuit, digital encoding/decoding circuit, digital modulator/demodulator (DQPSK), and filtering and amplification circuit.

System features

Excellent Audio Clarity

- Crystal-clear audio everywhere within an operating range of 20 meters
  - Freq. response: 50 Hz to 20 kHz
  - SNR: ≥85 dBA
  - THD: ≤0.06%
- Better audio acoustics protects lecturers from hoarse voice
- Clearer audio facilitates learning efficiency by helping students stay focused

Immunity to Interferences

- No crosstalk and interference between classrooms even when their systems are used at the same time
- Free from radio interference and electromagnetic radiation
- Insusceptible to interferences from HF-driven lighting and works perfectly in sunlight

Convenient Operation and Management

- Digital infrared microphones can be used in different classrooms without channel matching. Simply switch on and talk
- Integrated charging dock to park the microphone when it is not in use
- Electronic lock built in the dock to secure the microphone. Authorized users can scan QR code or swipe IC card to talk

No Electromagnetic Radiation

- Zero radio transmission
- Unaffected by radio frequency licensing
TES-5604N_W
Digital Infrared Wireless Microphone

Functions
■ Original dirATC—digital infrared audio transmission and control technology
■ Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
■ Insusceptible to interferences from HF-driven lighting and works perfectly in sunlight
■ Superior scalability, supporting audio input (Ø 3.5 mm AUDIO IN) from devices such as MP3 and mobile phone
■ Supports audio input from external microphones
■ Volume adjustment of the (fixed/external) microphone
■ Remote control of PPT slides
■ Supports laser pointer
■ Supports PTT (push to talk)
■ Transmitter powers off automatically when no voice is detected for a preset period of time
■ Microphone channel adjustable
■ Ergonomically compact and elegant design, can be held in hand or hung around the neck via a nice strap or fit on the necktie
■ Emission angle: vertical: 0°~ 90°, horizontal: 120°
■ Emission range: linear transmitting distance: over 25 m
■ Supports Lithium battery; battery life: 7 hours
■ Charge via USB port (compatible with mobile phone charger) or via charging station

Controls and Indicators
■ Microphone on/off button
■ Microphone volume up/down button
■ Microphone on (MIC) indicator
■ PPT mode indicator
■ Charging indicator
■ “...” button: select MIC/PPT mode
■ Laser pointer button and transmitter

Interconnections
■ Ø 3.5 mm jack for auxiliary audio input
■ Two charging contacts
■ USB port for charging

Technical Specifications

Electrical
IR transmission wavelength........................................ 870 nm
Modulation method........................................ DQPSK
Power........................................................... DC 5 V, 2 A
Carrier frequency
Audio channel 1: 1.0 MHz
Audio channel 2: 1.67 MHz
Audio channel 3: 2.33 MHz
Audio channel 4: 3.0 MHz
Audio channel 5: 3.67 MHz
Capacity of battery.............................................. 2300 mAh
When mic. is continuously on.................................. Approx. 7 hours

Interface data
Connector.............................. Ø 3.5 mm jack for auxiliary audio input
USB port for charging

Mechanical
Dimensions (h x w x d)......................................... 145 x 41 x 22 mm
Color....................................................... White (PANTONE 420 C)
Weight................................................... 80 g

Ordering Information
TES-5604N_W..................................... Digital Infrared Wireless Microphone (white, built-in rechargeable lithium battery, with laser pointer, excl. adapter, used with TES-5600NS_W neck lanyard or TES-5600CLP clip)

4
Digital Infrared Classroom Audio Reinforcement System

TES-5606
Digital Infrared Wireless Microphone

Functions

- Original dirATC—digital infrared audio transmission and control technology
- Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
- Insusceptible to interferences from HF-driven lighting and works perfectly in sunlight
- Supports audio input from external microphones (USB)
- Volume adjustment of the microphone
- Remote control of PPT slides
- Supports PTT (push to talk)
- Transmitter powers off automatically when no voice is detected for a preset period of time
- Microphone channel adjustable
- Ergonomically compact and elegant design, can be held in hand or hung around the neck via a nice strap or fit on the necktie
- Emission angle: vertical: 0°~90°, horizontal: 120°
- Emission range: linear transmitting distance: over 25 m
- Supports lithium battery, battery life: 5 hours
- Charge via USB port (compatible with mobile phone charger)

Controls and Indicators

- Microphone on/off button
- Microphone volume up/down button
- Microphone on (MIC) indicator
- PPT mode indicator
- Charging indicator
- "F" button: select MIC/PPT mode

Interconnections

- USB port for charging

Technical Specifications

Electrical

- IR transmission wavelength: 870 nm
- Modulation method: DQPSK
- Power: DC 5 V, 2 A
- Carrier frequency:
  - Audio channel 1: 1.0 MHz
  - Audio channel 2: 1.67 MHz
  - Audio channel 3: 2.33 MHz
  - Audio channel 4: 3.0 MHz
  - Audio channel 5: 3.67 MHz
- Capacity of battery: 1000 mAh
- When mic. is continuously on: Approx. 5 hours

Mechanical

- Dimensions (h x w x d): 76 x 25 x 20 mm
- Weight: 40 g

Ordering Information

TES-5606 Digital Infrared Wireless Microphone (built-in rechargeable lithium battery, excl. adapter, used with TES-5600NS_W neck lanyard or TES-5600CLP clip)
Functions

- Original dirATC—digital infrared audio transmission and control technology
- Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
- Insusceptible to interferences from HF-driven lighting and works perfectly in sunlight
- Supports audio input from external microphones (USB)
- Volume adjustment of the microphone
- Remote control of PPT slides
- Transmitter powers off automatically when no voice is detected for a preset period of time
- Microphone channel adjustable
- Ergonomically compact and elegant design, can be held in hand or hung around the neck via a nice strap or fit on the necktie
- Emission angle: vertical: 0°~ 90°, horizontal: 120°
- Emission range: linear transmitting distance: over 25 m
- Used with TES-5607PB power bank, battery life: 20 hours

Controls and Indicators

- Microphone on/off touch button
- Microphone volume up/down touch button
- Microphone on (MIC) indicator
- PPT mode indicator
- “F” touch button: select MIC/PPT mode

Technical Specifications

Electrical

- IR transmission wavelength: 870 nm
- Modulation method: DQPSK
- Power: DC 5 V, 2 A (TES-5607PB)
- Battery life: Approx. 20 hours
- Audio channel 1: 1.0 MHz
- Audio channel 2: 1.67 MHz
- Audio channel 3: 2.33 MHz
- Audio channel 4: 3.0 MHz
- Audio channel 5: 3.67 MHz

Mechanical

- Dimensions (h x w x d): 61 x 65 x 22 mm
- Weight: 30 g

Ordering Information

TES-5607 Digital Infrared Wireless Microphone
- (used with power bank and TES-5600NS_W neck lanyard or TES-5600CLP clip, excl. power bank)
TES-1021  Clip Microphone

- Features
  - Stylish and ergonomic design
  - Used for TES-5604/07 series microphones
  - Excellent immunity to RF interferences from mobile phones
  - Ø 3.5 mm stereo plug with a 0.3-meter cable
  - Color: black (PANTONE 419 C)
  - Weight: 10 g

TES-1022  Single-ear Microphone

- Features
  - Stylish and ergonomic design
  - Used for TES-5604/07 series microphones
  - Excellent immunity to RF interferences from mobile phones
  - Ø 3.5 mm stereo plug with a 0.55-meter cable
  - Weight: 11 g

TES-1023  Head-worn Microphone

- Features
  - Stylish and ergonomic design
  - Used for TES-5604/07 series microphones
  - Excellent immunity to RF interferences from mobile phones
  - Ø 3.5 mm stereo plug with a 1.2-meter cable
  - Weight: 18 g

Ordering Information

TES-1021  Clip Microphone
TES-1022  Single-ear Microphone
TES-1023  Head-worn Microphone
Digital Infrared Classroom Audio Reinforcement System

**TES-5600MIC**
Wired Desktop Microphone

**Features**
- Standard stem microphone
- 1 audio cable with USB port for connecting to main unit/ control box to transmit audio
- 1 microphone on/off button
- Dimensions (h x w x d, without stem): 43×135×132 mm
- Color: black (PANTONE 419 C)
- Weight: 0.4 kg

**Ordering Information**
TES-5600MIC Wireless Desktop Microphone (standard stem microphone: 60cm, optional: 50/70cm)

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**TES-5600CSMN**
Wired Desktop Microphone

**Features**
- Standard stem microphone
- 1 audio cable with USB port for connecting to main unit/ control box to transmit audio
- 1 microphone on/off button
- 1 lockable charging station for one TES-5604 microphone
- Support connecting to central control system via RS232 for unlocking microphone
- Support network management for unlock microphone, microphone status display, setting classroom information
- 1 USB port for connecting to TES-ADP5V adapter
- Dimensions (h x w x d, without stem): 53×135×132 mm
- Color: black (PANTONE 419 C)
- Weight: 0.4 kg

**Ordering Information**
TES-5600CSMN Wireless Desktop Microphone (standard stem microphone: 60cm, optional: 50/70cm; with a lockable charging station for one TES-5604 series microphone, can be unlocked via central control system or via network management system; support network management when used with TES-5604NSW Wireless Microphones Management Platform; with TES-ADP5V power adapter)
Digital Infrared Classroom Audio Reinforcement System

TES-5600CSML
Wired Desktop Microphone

Features
- Standard stem microphone
- 1 audio cable with USB port for connecting to main unit/ control box to transmit audio
- 1 microphone on/off button
- 1 lockable charging station for one TES-5604 microphone
- Support connecting to central control system via RS232 for unlocking microphone
- Support unlocking via scanning QR code
- Dimensions (h x w x d, without stem): 53×135×132 mm
- Color: black (PANTONE 419 C)
- Weight: 0.4 kg

Ordering Information
TES-5600CSML Wired Desktop Microphone (standard stem microphone: 60cm, optional: 50/70cm; with a lockable charging station for one TES-5604 series microphone, can be unlocked by scanning QR code or via central control system; with TES-ADP5V power adapter)

TES-5600CSM
Wired Desktop Microphone

Features
- Standard stem microphone
- 1 audio cable with USB port for connecting to main unit/ control box to transmit audio
- 1 microphone on/off button
- 2 charging stations for TES-5604 microphones
- 1 USB port for connecting to TES-ADP5V adapter
- Dimensions (h x w x d, without stem): 53×135×132 mm
- Color: black (PANTONE 419 C)
- Weight: 0.4 kg

Ordering Information
TES-5600CSM Wired Desktop Microphone (standard stem microphone: 60cm, optional: 50/70cm; with a charging station for two TES-5604 series microphones, with TES-ADP5V power adapter)
**MS50/60/70EGD2B Stem Microphone**

**Features**
- Built-in windshield,
- With 2 flexible parts
- Used for TES-5600 series Wired Desktop Microphone
- Stem length: 50/60/70 cm
- Color: black (PANTONE 419 C)

**Ordering Information**

MS50EGD2B...............Stem Microphone (50 cm, built-in windshield, flexible gooseneck tube, for TES-5600 series Wired Desktop Microphone, black)

MS60EGD2B...............Stem Microphone (60 cm, built-in windshield, flexible gooseneck tube, for TES-5600 series Wired Desktop Microphone, black)

MS70EGD2B...............Stem Microphone (70 cm, built-in windshield, flexible gooseneck tube, for TES-5600 series Wired Desktop Microphone, black)
Functions

- Original dirATC-digital infrared Audio Transmitting and Control technologies
- Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
- World pioneering infrared technology enables excellent audio quality
- Supports 2 wireless microphones
- Built-in amplifier, 4 speaker ports
- USB interface realizing quality-lossless sound recording during class on PC and intact input of streaming audio into the system
- Connection to central control system through RS232 interface for centralized control
- Multiple Emergency Alarms
  - Alarm can be triggered by either emergency switch on the main unit, central system or by pendant microphone to meet different needs of the customers
  - After the alarm is activated, emergency signal can be transmitted to central system. The signal can also control the electrical level to connect relay or alarm devices of the third party, which is highly flexible
  - The speaker can trigger the alarm by pendant microphone unnoticed and send the emergency signal to campus security center
- 1U high & half rack width

Controls and Indicators

- OLED displays status and menu of the system configuration, supporting multi language menu
- 1 knob for configuration
- Power switch with indicator

Interconnections

- Multiple audio in/out interfaces:
  - 2 audio LINE IN (Ø6.4 mm, LINE IN 1 can offer phantom power when being used for microphone input)
  - 2 audio LINE OUT (Ø6.4 mm)
  - 4 speaker ports
- DC power supply
- 2 RJ45 for connection to TES-5600RN/30 series Digital Infrared Receivers
- RS232 interface for connection to central control system
- 1 USB interface for digital audio input/output
- 1 A type USB for connecting to TES-5600MIC or TES-5600CSM series wired microphone for audio transmission

Technical Specifications

Electrical

- Power supply: 24 V DC
- Modulation method: DQPSK
- Carrier frequency: Audio channel 1: 2.33 MHz, Audio channel 2: 3.67 MHz
- Frequency response: main unit to main unit: 50 Hz to 20 kHz, Mic. to main unit: 50 Hz to 20 kHz
- SNR: Mic. to main unit: ≥ 85 dBA, Mic. to main unit: ≤ 0.06%
- THD: Mic. to main unit: ≤ 0.06%
- Dynamic range: Mic. to main unit: ≥ 90 dB
- Audio Power Amplifier
  - Max. output power: 60 W × 2 (8 Ohm), 30 W × 4 (8 Ohm)

Interface data

- Receiver terminal: RJ45 × 2
- External control terminal: 3.81 mm Phoenix connectors

Mechanical

- Mounting: tabletop or mounted in a 19" rack
- Dimensions (h x w x d): 55 x 211 x 236 mm (1U high & half rack width)
- Weight: 1.3 kg
- Color: Black (PANTONE 419 C)

Ordering Information

TES-5600MAU/30 Digital Infrared Classroom Audio System Main Unit (supports 2 wireless microphones, built-in amplifier, supports 4 speakers, can connect to TES-5600 series Wired Desktop Microphone for audio transmission, USB interface for digital audio input/output, phantom power, RJ45 interface to extend receiver, with adapter)
**Functions**
- Original dirATC-digital infrared Audio Transmitting and Control technologies
- Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
- World pioneering infrared technology enables excellent audio quality
- Supports 2 wireless microphones
- 2 RJ45 for digital infrared wireless receiver
- 2 PC IN (adjustable volume), 1 LINE OUT
- Built-in amplifier, 2 speaker ports
- 1 USB interface for remote control of PPT slides
- 1 A type USB interface for connecting to TES-5600MIC or TES-5600CSM series wired microphone for audio transmission

**Controls and Indicators**
- 1 volume knob for speakers
- 3 knobs for MIC volume, bass and treble
- Power switch with indicator

**Interconnections**
- 2 x 3.5 mm interface for PC IN with volume knob
- 1 x 3.5 mm interface for LINE OUT
- 1 A type USB interface for TES-5600MIC or TES-5600CSM series wired microphone
- 1 Micro USB interface for connecting to PC
- 2 RJ45 interface for connection to TES-5600RN/30 series Digital Infrared Receiver
- DC power supply

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**Technical Specifications**

**Electrical**
- Power supply: 24 V DC
- Modulation method: DQPSK
- Carrier frequency: Audio channel 1: 2.33 MHz, Audio channel 2: 3.67 MHz
- Frequency response: main unit to main unit: 50 Hz to 20 kHz, Mic. to main unit: 50 Hz to 20 kHz
- SNR: Mic. to main unit: ≥85 dBA
- THD: Mic. to main unit: ≤0.06%
- Dynamic range: Mic. to main unit: ≥90 dB
- Audio Power Amplifier
  - Max. output power: 60 W×2 (8 Ohm), 30 W×4 (8 Ohm)

**Mechanical**
- Dimensions (h x w x d): 41 x 168 x 120 mm
- Weight: 0.4 kg
- Color: Black (PANTONE 419 C)

**Ordering Information**
- TES-5600BX2/30 Digital Infrared Classroom Audio System Control Box (with RJ45 interface, supports 2 wireless microphones, built-in audio power amplifier can be connected to 4 loudspeakers, can connect to TES-5600 series Wired Desktop Microphone for audio transmission, 2 line in, 1 line out, with TES-ADP24V adapter)
TES-5600RN/30
Digital Infrared Receiver

Functions
- World pioneering digital infrared wireless lecturing system
- Based on TAIDEN originated dirATC-digital infrared Audio Transmitting and Control technologies
- Excellent immunity to RF interferences from HF-driven lighting and may operate well in sunlight
- Reception angle: vertical 150° (±75°), horizontal 360°
- Emission range: linear transmitting distance: over 25 m covered range: 80 to 100 m²

Indicators
- Power indicating light

Interconnections
- 1 RJ45 interface to connect CBLRJ45 Ethernet Extension Cable

Technical Specifications

Electrical
- Wavelength: 870 nm
- Modulation method: DQPSK
- Voltage: 12 V DC (supplied from main unit or control box)

Mechanical
- Mounting: Ceiling, wall or tripod mounting
- Dimensions: 60 × Ø 116 mm
- Weight: 220 g
- Color: Red (PANTONE 476)

Ordering Information
TES-5600RN/30 Digital Infrared Receiver (RJ45 interface, ceiling, wall or tripod-mounted, support 2 wireless microphones)

System Connection
Digital Infrared Classroom Audio Reinforcement System

TES-5685MB/30
Digital Infrared Classroom Audio System

System features
- Original dirATC-digital infrared Audio Transmitting and Control technologies
- Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
- World pioneering infrared technology enables excellent audio quality
- Selectable infrared carrier frequency for simultaneous use of two wireless microphones
- Built-in digital audio power amplifier and speakers for easy sound reinforcement
- 1 RJ45 interface for analog audio signals input/output
- 1 RJ45 interface for connection to TES-5600RN/30 series Digital Infrared Receiver
- Volume of speakers is adjustable
- Bass and Treble are adjustable
- Supports remote PPT slides
- Highly integrated, and easy to install

Controls and Indicators
- Switch:
  - F1.: select IR frequency
  - F2: set broadcast mode
  - AFC: set AFC function
  - AUTO FADE on: reduce line in volume automatically when the IR microphone is on
- Bass and Treble adjustment knob
- Volume control knob

Interconnections
- RJ45 socket (RECEIVER) for connection to TES-5685BX series control box
- Micro USB interface for connecting to computer
- RJ45 interface for connecting TES-5600RN/30 series receiver

Technical Specifications

Electrical
- Power supply: AC 100-240 V, 1.5 A
- Modulation method: DQPSK
- Carrier frequency:
  - Audio channel 1: 2.33MHz
  - Audio channel 2: 3.67 MHz
- Frequency response:
  - Main unit to main unit: 50 Hz to 20 kHz
  - Mic. to main unit: 50 Hz to 20 kHz
- SNR: Mic. to main unit: ≥85 dBA
- THD: Mic. to main unit: ≤0.06%
- Dynamic range: Mic. to main unit: ≥90 dB
- Emission angle: vertical: 150° (±75°), horizontal: 360°
- IR radiation range: Line-of-sight distance: 25 m

Mechanical
- Speaker interface: Max. 4×30 W (12 Ohm)
- Dimension (h x w x d, mm): 206 x 331 x 319
- Color: White (PANTONE 420 C)
- Weight: 3.5 kg

Ordering Information
TES-5685MB/30, Digital Infrared Classroom Audio System Main Unit (with digital infrared receiver, supports 2 wireless microphones, analog audio input/output, built-in audio power amplifier and integrated loudspeakers, RJ45 interface for extending receiver)
Digital Infrared Classroom Audio Reinforcement System

TES-5685MC/30
Digital Infrared Classroom Audio System

System features
- Original dirATC-digital infrared Audio Transmitting and Control technologies
- Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
- World pioneering infrared technology enables excellent audio quality
- Selectable infrared carrier frequency for simultaneous use of one wireless microphone
- Built-in digital audio power amplifier and speakers for easy sound reinforcement:
  - 1 RJ45 socket for analog audio signals input/output
  - 1 RJ45 interface for connection to TES-5600RN/30 series Digital Infrared Receiver
- Volume of speakers is adjustable
- Bass and Treble are adjustable
- Supports remote PPT slides
- Highly integrated, and easy to install

Controls and Indicators
- Switch:
  - F1.: select IR frequency
  - F2: set broadcast mode
  - AFC: set AFC function
  - AUTO FADE on: reduce line in volume automatically when the IR microphone is on
- Bass and Treble adjustment knob
- Volume control knob

Interconnections
- RJ45 socket (RECEIVER) for connection to TES-5685BX series control box
- Micro USB interface for connecting to computer
- RJ45 interface for connecting TES-5600RN/30 series receiver

Technical Specifications

Electrical
- Power supply: AC 100-240 V, 1.5 A
- Modulation method: DQPSK
- Carrier frequency:
  - Audio channel 1: 1.67 MHz
  - Audio channel 2: 2.33 MHz
  - Audio channel 3: 3.0 MHz
- Frequency response:
  - Main unit to main unit: 50 Hz to 20 kHz
  - Mic. to main unit: 50 Hz to 20 kHz
- SNR: Mic. to main unit: ≥85 dBA
- THD: Mic. to main unit: ≤0.06%
- Dynamic range: Mic. to main unit: ≥90 dB
- Emission angle:
  - Vertical: 150° (±75°)
  - Horizontal: 360°
- IR radiation range: Line-of-sight distance: 25 m

Mechanical
- Speaker interface: Max. 4×30 W (12 Ohm)
- Dimension (h x w x d, mm): 206 x 331 x 319
- Color: White (PANTONE 420 C)
- Weight: 3.5 kg

Ordering Information
- TES-5685MC/30: Digital Infrared Classroom Audio System Main Unit (with digital infrared receiver, supports 1 wireless microphone, analog audio input/output, built-in audio power amplifier and integrated loudspeakers, RJ45 interface for extending receiver)
TES-5685MCP/30
Digital Infrared Classroom Audio System

**System features**

- Original dirATC-digital infrared Audio Transmitting and Control technologies
- Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
- World pioneering infrared technology enables excellent audio quality
- Selectable infrared carrier frequency for simultaneous use of one wireless microphone
- Built-in digital audio power amplifier and speakers for easy sound reinforcement:
  - 1 RJ45 socket for analog audio signals input/output
  - 1 RJ45 interface for connection to TES-5600RN/30 series Digital Infrared Receiver
- Volume of speakers is adjustable
- Bass and Treble are adjustable
- 1 RJ45 interface for connection to TES-5685BXP and PC via switcher, seeing the system status and adjusting the system parameters through Web Server
- Supports remote PPT slides
- Highly integrated, and easy to install

**Controls and Indicators**

- Switch:
  - F1.: select IR frequency
  - F2: set broadcast mode
  - AFC: set AFC function
  - AUTO FADE on: reduce line in volume automatically when the IR microphone is on
- Bass and Treble adjustment knob
- Volume control knob

**Interconnections**

- RJ45 socket (RECEIVER) for connection to TES-5685BX series control box
- Micro USB interface for connecting to computer
- RJ45 interface for connecting TES-5600RN/30 series receiver
- RJ45 interface for connection to TES-5685BXP and PC

**Technical Specifications**

**Electrical**

- Power supply: AC 100-240 V, 1.5 A
- Modulation method: DQPSK
- Carrier frequency:
  - Audio channel 1: 1.67 MHz
  - Audio channel 2: 2.33 MHz
  - Audio channel 3: 3.0 MHz
- Frequency response:
  - main unit to main unit: 50 Hz to 20 kHz
  - Mic. to main unit: 50 Hz to 20 kHz
- SNR:
  - Mic. to main unit: ≥85 dBA
- THD:
  - Mic. to main unit: ≤0.06%
- Dynamic range:
  - Mic. to main unit: ≥90 dB
- Emission angle:
  - Vertical: 150° (±75°), horizontal: 360°
- IR radiation range: 25 m

**Mechanical**

- Speaker interface: Max. 4×30 W (12 Ohm)
- Dimension (h x w x d, mm): 206 x 331 x 319
- Color: White (PANTONE 420 C)
- Weight: 3.5 kg

**Ordering Information**

TES-5685MCP/30 Digital Infrared Classroom Audio System Main Unit (with digital infrared receiver, supports 1 wireless microphone, analog audio input/output, with built-in audio power amplifier and integrated loudspeakers, network connection for PA and network management, RJ45 interface for extending receiver)
Digital Infrared Classroom Audio Reinforcement System

TES-5685PA
Function Extension Box

Functions
- Function extension box for TES-5685MCP/30
- 1 LINE IN
- 1 PA IN with loop out, when the PA trigger enabled, the audio of PA IN puts out to all outputs and all other inputs are muted
- Volume of PA IN and LINE IN adjustable
- 1 RJ45 interface for connecting to 5685M to transmit audio
- 2 RJ45 interface for connection to TES-5685MCP and PC via switcher, seeing the system status and adjusting the system parameters through Web Server
- Power supply: 24V, 1.5A (2P aviation plug base)
- Dimensions (h x w x d): 41 x 168 x 120 mm
- Weight: 0.4 kg

Ordering Information
TES-5685PA, Function Extension Box (for TES-5685MCP, 1 line in, 1 PA in with loop out, 1 PA trigger)

TES-5685BX/30
Function Extension Box

Functions
- Function extension box for TES-5685M
- 1 PC IN and 1 LINE OUT
- Volume of MIC IN and LINE IN adjustable
- 1 RJ45 interface for connecting to 5685M to transmit audio
- 1 A type USB interface for connecting to TES-5600MIC or TES-5600CSM series wired microphone for audio transmission
- 1 USB port for connecting to TES-ADP5V adapter as power supply for audio transmission of wired microphone
- Dimensions (h x w x d): 30 x 105 x 82 mm
- Weight: 0.2 kg

Ordering Information
TES-5685BX/30, Function Extension Box (for TES-5685M, analog audio input/output, can connect to TES-5600 series Wired Desktop Microphone for audio transmission, with 1 line in and 1 line out)
TES-5685BXP/30
Function Extension Box

Functions

- Function extension box for TES-5685M
- 1 PC in and 1 line out
- 1 input for public address system, when the PA trigger enabled, the audio of PA IN puts out to all outputs and all other inputs are muted
- Volume of MIC. IN and LINE IN adjustable
- 1 RJ45 interface for connecting to 5685M to transmit audio
- 1 A type USB interface for connecting to TES-5600MIC or TES-5600CSM series wired microphone for audio transmission
- 1 USB port for connecting to TES-ADP5V adapter as power supply for audio transmission of wired microphone
- Dimensions (h x w x d): 30 x 105 x 82 mm
- Weight: 0.2 kg

Ordering Information

TES-5685BXP/30 Function Extension Box (for TES-5685M series, analog audio input/output, can connect to TES-5600 series Wired Desktop Microphone for audio transmission, 1 line out+1 line in, 1 PA trigger)
Digital Infrared Classroom Audio Reinforcement System

System Connection

Function List

<table>
<thead>
<tr>
<th>Type No.</th>
<th>TES-5685MB/30</th>
<th>TES-5685MC/30</th>
<th>TES-5685MCP/30</th>
</tr>
</thead>
<tbody>
<tr>
<td>IR microphone</td>
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<td>1</td>
<td>1</td>
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<tr>
<td>Audio amplifier</td>
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<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Built-in speaker</td>
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<td>●</td>
<td>●</td>
</tr>
<tr>
<td>LIEN IN/ LINE OUT</td>
<td>● (with TES-5685BX series)</td>
<td>● (with TES-5685BX series)</td>
<td>● (with TES-5685PA/BX series)</td>
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<td>AUDIO I/O</td>
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<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Wired microphone</td>
<td>● (with TES-5685BX series)</td>
<td>● (with TES-5685BX series)</td>
<td>● (with TES-5685BX series)</td>
</tr>
<tr>
<td>PA IN</td>
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<td>● (with TES-5685BXP/30)</td>
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<td>RJ45</td>
<td>RJ45</td>
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