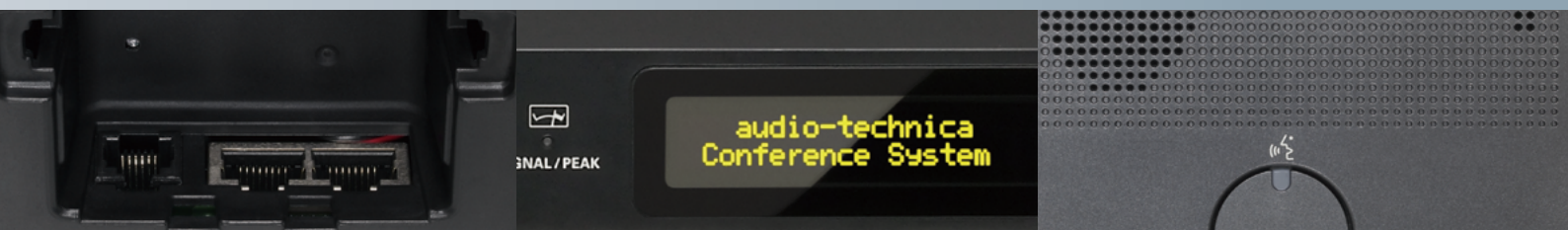# ATUC-50
## Digital Full-Featured Discussion Solution

- Excellent speech intelligibility with built-in feedback suppressor and voice processing on individual discussion units

- Up to 150 discussion units

- Daisy chain or ring topology connection through Cat 5e and above cables

- Voice activation mode for free discussion plus a variety of manual modes

- Built-in audio recorder to external USB memory devices

- Control available through web remote interface and third party control systems

- Expandable and scalable system design

Digital
Full-Featured Discussion
Solution

# ATUC-50

# PRODUCT INFORMATION

## Discussion Unit
# ATUC-50DU

### Discussion unit with high-quality audio

- Individually programmable multi-profile versatile unit: Delegate or Chairman
- Unit connector compatible with standard 3-pin XLR microphones
- Low Noise (EIN:127dB) microphone preamp using discrete transistors, with individual (per discussion unit) adjustable gain control
- High quality speaker for enhanced speech intelligibility
- 24-bit/48 kHz audio quality
- Multiple independent indicator (multi-coloured RGB LED bar on rear of Discussion Unit and LED on the talk button)
- Clear LED display for volume control and listening channel selection
- Optional, removable weight plate for improved stability
- 2x RJ45 Port for connecting to the Control Unit and other Discussion Units and 1x expansion port for future options
- 1x Headphone output
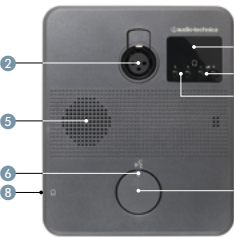
① DU display
② Microphone connector
③ </> (monitor channel) buttons
④ -/+ (headphone) buttons
⑤ Bulit-in speaker
⑥ (talk) LED
⑦ (talk) button
⑧ Headphone jack
⑨ Rear LED
⑩ External device connection terminal
⑪ Chain connection terminals
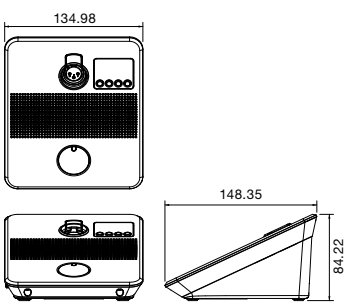
| I/O connectors | Inputs | Mic×1 |
|---|---|---|
| | Outputs | Headphones×1 |
| | CHAIN | DU/CU terminals |
| Resolution/ Sampling frequency | 24bit/48kHz | |
| Frequency response | +1.0, -2.0dB, 20Hz～20kHz, refer to +4dBu output @1kHz. | |
| Dynamic range | 107dB、A-Weighted | |
| Signal to noise | 87dB、A-Weighted | |
| Headroom | 20dB | |
| Equivalent input noise | Less than -121dBu, Rs=150ohm | |

| Total harmonic distortion | Less than 0.07% 1kHz unity |
|---|---|
| Phantom power | DC+24V |
| Power requirement | DC+48V |
| Power consumption | 2.2W |
| Operation temperature | 0～40℃ |
| Operation humidity | 25～85% |
| Dimensions (W×D×H) | 135mm×148.3mm×84.2mm |
| Net Weight | 570g (900g including the optional bottom weight) |
| Finish | Top panel/Gun metal, Enclosure/Black |
| Included Accessories | Quick Setup Guide, Warranty |

134.98
148.35
84.22

## Microphone
# ATUC-M43H

## Microphone
# ATUC-M58H

### Specially designed 3-pin Microphone with LED Ring

- Unique 3-pin balanced microphone (PAT.P) with remote controlled LED ring offering both high sound quality and user flexibility
- Patent-pending design isolates the microphone connector from the Discussion Unit socket
- Double layer pop filter (inside microphone and detachable wind screen)
- RFI-shielding technology offers outstanding rejection of radio frequency interference (RFI)
- Two lengths available (430mm, 580mm)

| | ATUC-M43H | ATUC-M58H |
|---|---|---|
| Element | Fixed-charge back plate, permanently polarized condenser | |
| Polar pattern | Hypercardioid | |
| Frequency response | 100～15,000Hz | |
| Open circuit sensitivity | -40 dB (10.0 mV) re 1V at 1 Pa | |
| Maximum input sound level | 134 dB SPL, 1 kHz at 1% T.H.D. | |
| Signal-to-noise ratio | 64 dB, 1 kHz at 1 Pa | |
| Impedance | 250 ohms | |
| Finish | Low-reflectance black | |
| Dimensions | φ18.9×430 | φ18.9×580 |
| Weight | 82g | 92g |

φ20
φ12.2
51.5
φ20
φ12.2
51.5
430
446
580
596
44
44
φ18.9
φ18.9

ATUC-M43H
ATUC-M58H
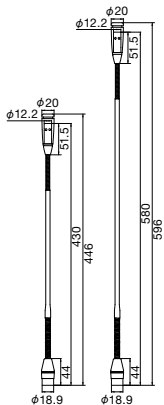
## Control Unit
# ATUC-50CU

### The heart of the ATUC-50 system

- Powers up to 50 Discussion Units
- Cascade capability to handle up to 150 Discussion Units
- 4 configurable balanced outputs plus Output 1 mirrored to unbalanced output
- 2 Mic/Line In + 2 Aux In + 2 Return In
- 2 Return In channels handle Floor + 2 additional languages
- Conference Mode: Free talk, Request to talk and Full remote
- Override settings: LIFOR, FIFO and Non Override
- 'Mic On' trigger: Manual or Voice activation
- Web remote interface facilitates pre-meeting system setup and management of the live discussion through a web browser
- Built-in Wav and MP3 Recorder to external USB memory devices, up to 4 Channels (2 channel only in MP3)
- Built-in feedback suppressor and processing for optimal audio quality
- Fully digital system with future-proof upgrade capability
- Gain sharing algorithm substantially reduces the risk of feedback while maintaining a natural sound

482

345.1

49.5
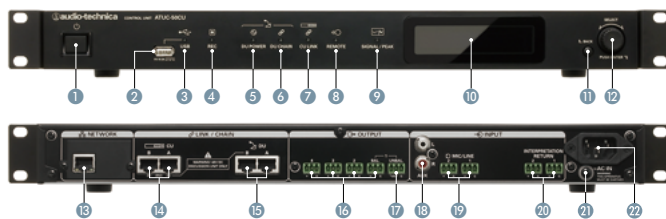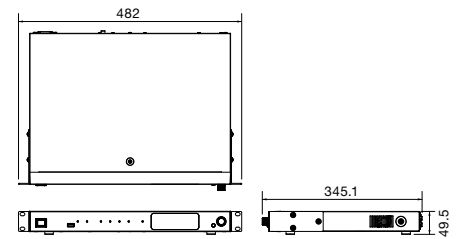
| ❶ Power switch | ⓭ NETWORK terminal |
| ❷ USB (for a USB flash drive) terminal | ⓮ CU LINK A/B terminals, DU CHAIN C/D terminals |
| ❸ USB access indicator | |
| ❹ REC (recording) indicator | ⓯ DU CHAIN A/B terminals |
| ❺ DU POWER (DU power supply) indicator | ⓰ Analog output (balanced) terminal |
| ❻ DU CHAIN indicator | ⓱ Analog output (unbalanced) terminal |
| ❼ CU LINK indicator | ⓲ Analog input (unbalanced) terminal |
| ❽ Remote (remote control) indicator | ⓳ Analog input (balanced) terminal |
| ❾ SIGNAL/PEAK indicator | ⓴ Analog input (balanced) terminal |
| ❿ CU display | ㉑ Ground screw |
| ⓫ BACK button | ㉒ AC Inlet (AC IN) |
| ⓬ Jog dial/ENTER button | |

| I/O Connectors | Inputs | MIC/LINE×2, AUX(ST)×1, Interpretation Return×2 |
| --- | --- | --- |
| | Outputs | Balanced×4, Unbalanced×1 |
| | LINK/CHAIN | DU A/B terminals, CU A/B terminals (DU C/D terminals) |
| Recording | Via USB Storage Device | 1/2/3/4track (WAV) with CUE point (BWF standard) |
| | | 1/2track (MP3) with CUE point (Original format) |
| | MP3 bit rate | 64kbps/128kbps/192kbps/256kbps/320kbps |
| Resolution/ sampling frequency | | 24bit/48kHz |
| Latency | | MIC Input to Output: 1ms |
| Frequency response | | +1.0, -2.0dB, 20Hz～20kHz, refer to +4dBu output @1kHz. |
| Dynamic range | | 110dB A-Weighted |
| Signal to noise | | 90dB A-Weighted |
| Headroom | | 20dB |
| Equivalent input noise | Mic/Line 1-2 | |
| | Less than -126dBu, Rs=150ohm | |

| Residual noise | Less than -86dBu, A-Weighted |
| --- | --- |
| Total harmonic distortion | Less than 0.03% @1kHz unity |
| Crosstalk @1kHz | Less than -80dB |
| OLED display | 20×2 Character type, Color: Yellow, Operating life time: 100,000 hours |
| Phantom power | DC+48V |
| Power requirement | AC 100V～240V 50/60Hz |
| Power consumption | 20W～195W (max.) |
| Operation temperature | 0～40℃ |
| Operation humidity | 25～85% |
| Dimensions (W×D×H) | 482.6mm×331.6mm×44mm |
| Net weight | 3.4kg |
| Finish | Front panel/Black, Top&Rear/Black |
| Included Accessories | AC power cord, Quick Setup Guide×2, Euroblock connectors×9, Warranty |

# Web Remote Control

### Easy control and management through web-based remote access

- Accessible from any web browser (Mac, PC, iOS & Android Tablet)
- No need to install any additional software
- User access control with Operator and Administrator privilege
- Setup and configuration: Network Setting, Audio Setting, Mic Setting, Conference Setup, Indivudual Discussion Unit Setting, etc.
- Conference management: Delegate list, Mic activation, Recording activation, etc.
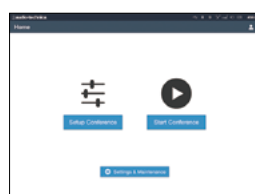
Home
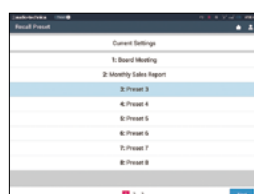
Preset
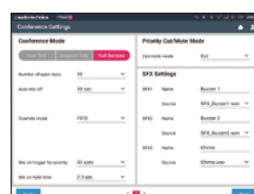
Conference Setting

Discussion Unit Setting

Conference Manager

## █ Simple, reliable and full-featured digital discussion system

Whatever your conferencing or discussion needs, the ATUC-50 is designed to offer reliable, clear and intelligible communication to significantly increase meeting efficiency and effectiveness.

Voice is the quickest and most efficient tool medium for exchanging ideas - whether in meeting rooms, in councils, in classrooms or through videoconference, speech is the most direct way of communication and understanding.

Audio-Technica's new wired ATUC-50 conference system is designed to offer a reliable  and effective way to speak and to be heard.

## █ Ease of use

Using standard Cat 5e (and above) cabling, the ATUC-50 system connects easily through a daisy chain or ring topology.

The Web Remote Control Interface allows quick and easy configuration, plus management directly from any web browser, without need to install dedicated software.

The on-board audio recorder can support up to 4 discrete channels for easy archiving without the need of an external recording device.
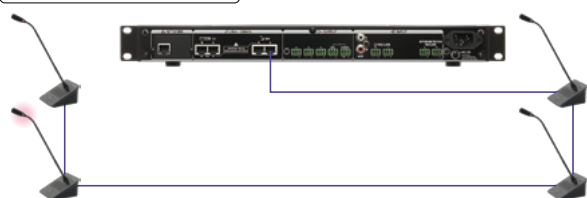
All settings can be saved as presets and easily recalled before the start of each meeting.
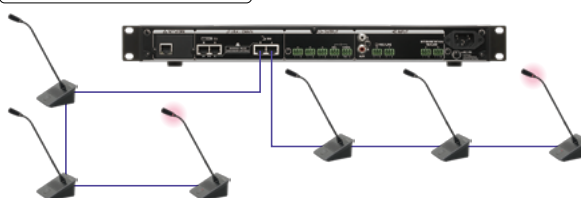
## █ Reliability

For added redundancy the ATUC-50 can be configured using a ring topology.

The Web Remote Control Interface allows two user permission levels to avoid any unwanted access or accidental programming changes.
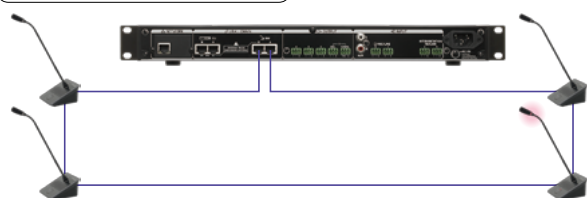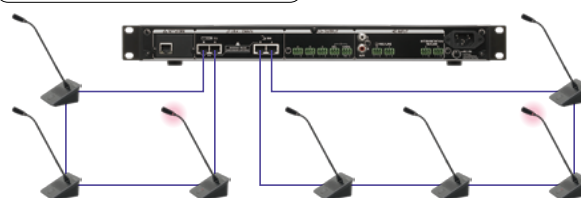
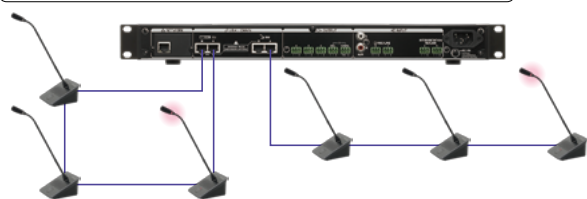Daisy Chain ×1 Chain

Daisy Chain ×2 Chains
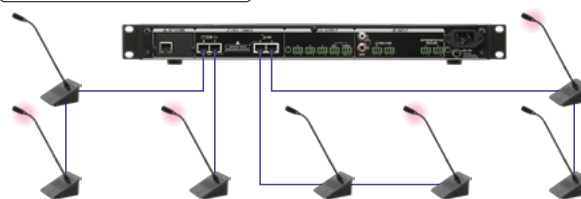
Ring Connection ×1 Chain

Ring Connection ×2 Chains

Ring Connection ×1 Chain, Daisy Chain ×1 Chain

Daisy Chain ×4 Chains

## █ Flexibility

Advanced configuration can be used to tailor the system to the users' needs. Each configuration can be saved and recalled instantly.

Multiple modes such as 'Free Talk', 'Request To Talk', 'Full Remote'; various 'override settings' :'LIFO', 'FIFO' and 'Non Override'; and flexible 'Mic On trigger mode': manual or voice activation; allow for adaption to each and every situation.

IP Control allows full parameter access from most third party control systems.

Floor plus 2 Interpretation channels answer today's need in contemporary meeting rooms.

## █ Sound quality and Speech Intelligibility

Individual Mic Gain and EQ to adjust each participant's voice.
Low Noise (EIN:127dB) mic preamp using discrete transistors.
24-bit/48kHz uncompressed digital audio for natural sounding voice reproduction.
12 band feedback suppressor allows higher volume levels without causing feedback.
Dynamic processing and 8-band parametric EQ on the main Analog output.

## System connection example

Web Remote Control
Windows / Mac

Web Remote Control
Tablet

up to 50 units
ATUC-50DU

up to 50 units
ATUC-50DU

Wireless Access Point

Interpretation system

Mic

Router

Network Switch

ATUC-50CU
(Sub)

ATUC-50CU
(Main)

ATUC-50CU
(Sub)

CD player

Amplifier

Speaker

Built-in audio recorder to external USB memory devices.

Interpretation system

Recorder

up to 50 units
ATUC-50DU

For more information contact:

*always listening*

audio-technica