

Wireless Voting System



HCS-4100MTB/00
Wireless Voting System Main Unit



HCS-4390A
HCS-4390AK (with IC-card)
Wireless Voting Unit
(F-style)



HCS-4391
Wireless Transceiver



HCS-4395A (LCD)
HCS-4395AK (LCD/IC card)
Wireless Voting Unit

HCS-4390 Series Wireless Voting Units		7.2
HCS-4390A	Wireless Voting Unit (3 voting keys)	7.2
HCS-4390AK	Wireless Voting Unit (3 voting keys, IC-Card)	7.2
HCS-4395 Series Wireless Voting Units		7.3
HCS-4395A	Wireless Voting Unit (3 voting keys)	7.3
HCS-4395AK	Wireless Voting Unit (3 voting keys, IC-Card)	7.3
HCS-4391 RF Transceiver		7.4
HCS-4100MTB/00 Wireless Voting System Main Unit (1 RF transceiver HCS-4391 provided)		7.5
Application Software for Wireless Voting System		7.8
HCS-4214/20	Voting Management Module (including delegate management, parliamentary voting, multi voting)	7.8
HCS-4221/20	Multi-user Conference Control Management Module	7.8
HCS-4222/20	Dual PC Server Hot Spare Module	7.9
HCS-4223/20	Agenda Control Module	7.9

HCS-4390A Wireless Voting Unit



Features

- Portable, stylish and ergonomic design
- Wireless digital communication, adopting multilevel error correction and encrypted coding for high confidentiality and low error rate
- RF transceiving range: 100 m (frequency optional)
- Large LCD for displaying voting and sign-in information, easy to use
- Max. system capacity: 10000 wireless voting units
- 3 voting keys
- Multiform voting implementation in combination with the corresponding software modules:
 - ◆ For/Against
 - ◆ Parliamentary: YES/NO/ABSTAIN
 - Pass-rate setup, voting result calculated automatically
 - Voting result calculated according to predefined or present attendance
 - ◆ Multi choice/Opinion poll
 - 1-N: N candidates for voting (use “YES/+” key or “NO/-“ key)
 - ◆ Audience response/Rating
 - 0/25/50/75/100 (use “YES/+” key or “NO/-“ key)
- Key-press sign-in
- Two alkaline batteries (AA battery) for continuous using not less than 120 hours

Technical Specifications

Mechanical

Dimensions (h x w x d).....29×183×51 mm
 Weight.....0.2 kg
 Color.....Gray

Ordering Information

HCS-4390A.....Wireless Voting Unit (3 voting keys)

HCS-4390AK Wireless Voting Unit with IC-Card Reader



Features

- Portable, stylish and ergonomic design
- Wireless digital communication, adopting multilevel error correction and encrypted coding for high confidentiality and low error rate
- With a wireless RF transceiving range of 100 m (frequency optional)
- Large LCD for displaying voting and sign-in information, easy to use
- Max. system capacity: 10000 wireless voting units
- 3 voting keys
- Built-in IC-card reader
- Multiform voting implementation in combination with the corresponding software modules:
 - ◆ For/Against
 - ◆ Parliamentary: YES/NO/ABSTAIN
 - Pass-rate setup, voting result calculated automatically
 - Voting result calculated according to predefined or present attendance
 - ◆ Multi choice/Opinion poll
 - 1-N: N candidates for voting (use “YES/+” key or “NO/-“ key)
 - ◆ Audience response/Rating
 - 0/25/50/75/100 (use “YES/+” key or “NO/-“ key)
- Key-press sign-in
- Two alkaline batteries (AA battery) for continuous using not less than 120 hours

Technical Specifications

Mechanical

Dimensions (h x w x d)29×183×51 mm
 Weight.....0.2 kg
 Color.....Gray

Ordering Information

HCS-4390AK.....Wireless Voting Unit (3 voting keys, IC-Card)

HCS-4395A Wireless Voting Unit



Features

- Tabletop, stylish and ergonomic design
- Wireless digital communication, adopting multilevel error correction and encrypted coding for high confidentiality and low error rate
- RF transceiving range: 100 m (frequency optional)
- Large LCD for displaying voting and sign-in information, easy to use
- Max. system capacity: 10000 wireless voting units
- 3 voting keys
- Multiform voting implementation in combination with the corresponding software modules:
 - ◆ For/Against
 - ◆ Parliamentary: YES/NO/ABSTAIN
 - Pass-rate setup, voting result calculated automatically
 - Voting result calculated according to predefined or present attendance
 - ◆ Multi choice/Opinion poll
 - 1-N: N candidates for voting (use “YES/+” key or “NO/-“ key)
 - ◆ Audience response/Rating
 - 0/25/50/75/100 (use “YES/+” key or “NO/-“ key)
- Key-press sign-in
- Two alkaline batteries (AA battery) for continuous using not less than 120 hours

Technical Specifications

Mechanical

Dimensions (h x w x d).....48×142×75 mm
 Weight.....0.19 kg
 Color.....Silver

Ordering Information

HCS-4395A.....Wireless Voting Unit (3 voting keys)

HCS-4395AK Wireless Voting Unit with IC-Card Reader



Features

- Tabletop, stylish and ergonomic design
- Wireless digital communication, adopting multilevel error correction and encrypted coding for high confidentiality and low error rate
- RF transceiving range: 100 m (frequency optional)
- Large LCD for displaying voting and sign-in information, easy to use
- Max. system capacity: 10000 wireless voting units
- 3 voting keys
- Built-in IC-card reader
- Multiform voting implementation in combination with the corresponding software modules:
 - ◆ For/Against
 - ◆ Parliamentary: YES/NO/ABSTAIN
 - Pass-rate setup, voting result calculated automatically
 - Voting result calculated according to predefined or present attendance
 - ◆ Multi choice/Opinion poll
 - 1-N: N candidates for voting (use “YES/+” key or “NO/-“ key)
 - ◆ Audience response/Rating
 - 0/25/50/75/100 (use “YES/+” key or “NO/-“ key)
- Key-press sign-in
- Two alkaline batteries (AA battery) for continuous using not less than 120 hours

Technical Specifications

Mechanical

Dimensions (h x w x d).....48×142×75 mm
 Weight.....0.19 kg
 Color.....Silver

Ordering Information

HCS-4395AK.....Wireless Voting Unit (3 voting keys, IC-Card)

HCS-4391 RF Transceiver



Functions

- Wireless two-way transmitting and receiving facility
- RF transceiving range: 100 m (frequency optional)
- Used with HCS-4100MTB/00 wireless voting main unit and HCS-4390/4395 series wireless voting units

Controls and Indicators

- ID setup switcher low position
- ID setup switcher high position
- Two wireless reception indicators (red)
- Two communication indicators (red)
- Two power switches with indicators (green)

Interconnections

- TAINET (RS-485) interface for connection to HCS-4100MTB/00
- RS-422 interface for connection to HCS-4100MTB/00
- Power supply adapter interface
- RS-232 interface for connection to PC. This port is only available for small-sized wireless conferences with only one HCS-4391 and no need for a conference main unit

Technical Specifications

Electrical

Power supply.....DC 9 V ~ 24 V
 Max. power consumption.....1.5 W
 Wireless radiated power.....9 dBm±15 dBm
 Wireless reception sensitivity.....-99 dBm±2 dBm

Mechanical

Dimensions (h x w x d).....33×200×200 mm
 Adjustable length of antenna.....150 ~ 450 mm
 Weight.....1.1 kg
 Color.....White

Ordering Information

HCS-4391..... RF Transceiver

HCS-4100MTB/00 Wireless Voting System Main Unit



Features

- TCP/IP communication protocol in PC control
- Voting facilities without PC intervention
- Connected with RF transceiver, wireless voting can be carried out by wireless voting units
- Maximum system capacity is 10,000 wireless voting units
- Plug and play for all units

The Wireless Voting System Main Unit features wireless voting by connecting voting units wirelessly to the RF transceiver. 10,000 wireless voting units can be connected when using HCS-4391 RF transceiver and extension main units.

Effective transceiver range: 100 m

Additional transceivers can be added - at most 8 RF transceiver per voting main unit.

Functions

- Full digital design, compliant to IEC 60914
- Maximum system capacity: 10,000 wireless voting units
- Connected with RF transceiver, wireless voting can be carried out by wireless voting units
- Automatic recovery facility, supports "PnP"(plug and play)
- Voting system resistivity to static: 8 kV, conforms to IEC CISPR 24
- Parliamentary voting (YES/NO/ABSTAIN) implementation when system is operated in stand-alone mode
- Multifunction voting implementation when combined with the corresponding software modules:
 - ◆ For/Against
 - ◆ Parliamentary: YES/NO/ABSTAIN
 - Pass-rate setup, voting result calculated automatically
 - Voting result calculated according to predefined or present attendance
 - ◆ Multi choice/Opinion poll
 - 1-N: N candidates for voting (use "YES/+" key or "NO/-" key)
 - ◆ Audience response/Rating
 - 0/25/50/75/100 (use "YES/+" key or "NO/-" key)
- Supports voting launch by chairman unit. The voting result can be displayed on the LCD

- Adopting TCP/IP network protocol to communicate with PC, voting system can implement remote control, remote diagnosis and remote update
- Unique system self-detection function, detecting status of the voting units and reporting abnormal units for pinpointing

Controls and Indicators

- Graphic LCD with back-lighting, displaying status and system configuration menu of main unit, supporting multi-language menus
- Four buttons for configuration
- Power switch with indicator (red)

Interconnections

- Two RS-232 ports for connection to intelligent Central Control System and system diagnosis each
- Two 5 pin 3.81 mm Phoenix connectors for connection to RF transceivers
- Ethernet interface for connection to PC
- Power supply interface

Technical Specifications

Electrical

Power supply	220 V±10%/110 V±10%
Max. power consumption	410 W
Wireless radiated power	9 dBm±15 dBm
Wireless reception sensitivity	-99 dBm±2 dBm
RS-232 connection	2 x nine-pole Sub-D female socket
RF transceivers	2 x 3.81 mm Phoenix connector, 5 pin

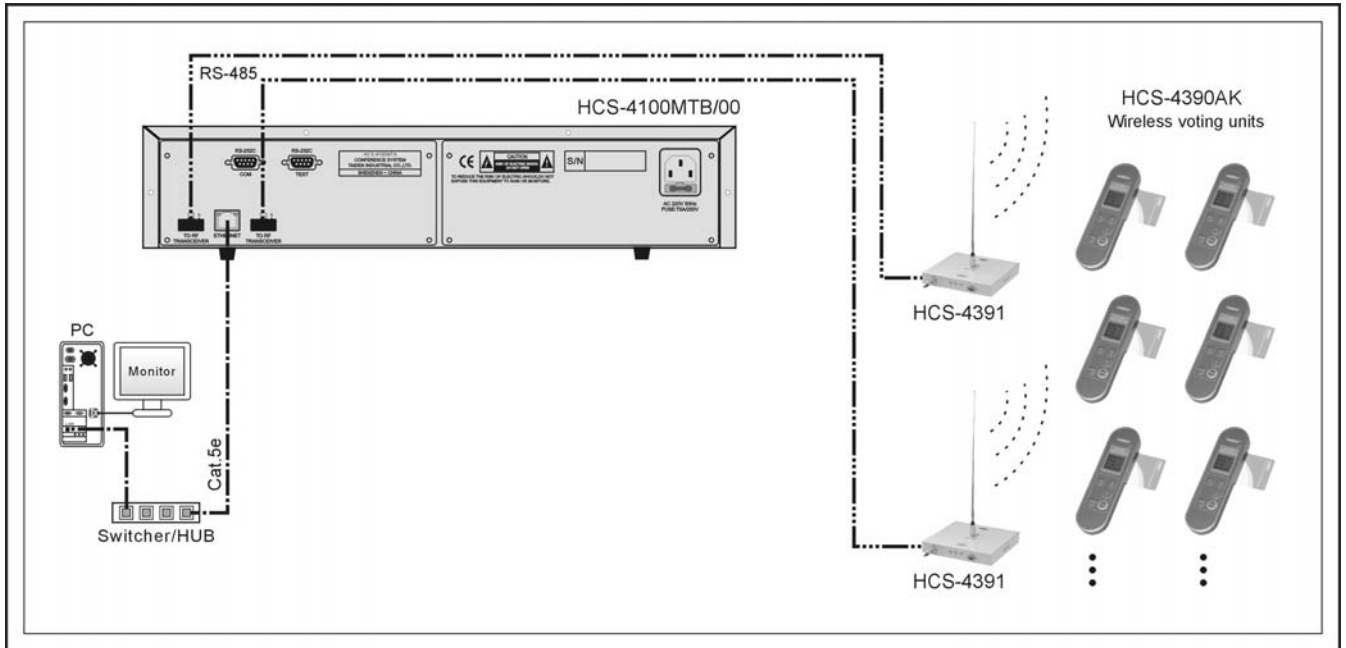
Mechanical

Mounting	Tabletop or mounted in a 19" rack
Dimensions (h x w x d)	99 × 430 × 325 mm
Weight	11.5 kg
Color	White

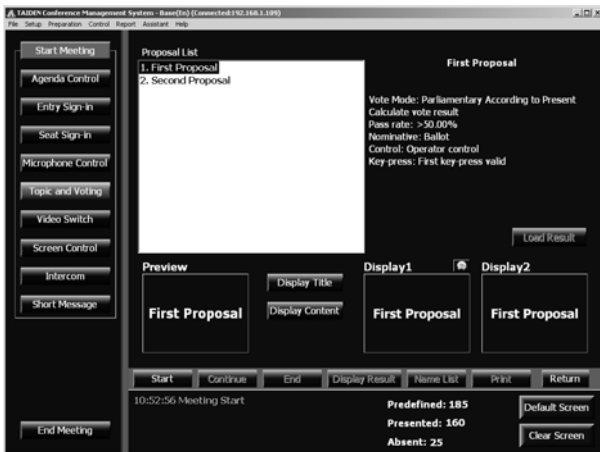
Ordering Information

HCS-4100MTB/00..... Wireless Voting System Main Unit
(1 RF transceiver HCS-4391 provided)

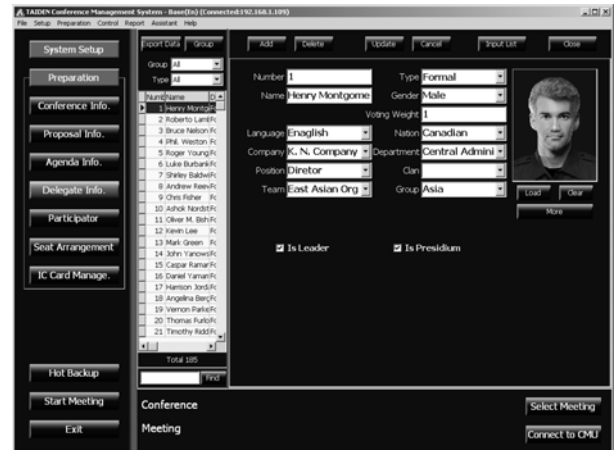
System Connection



HCS-4214/20 Voting Management Module



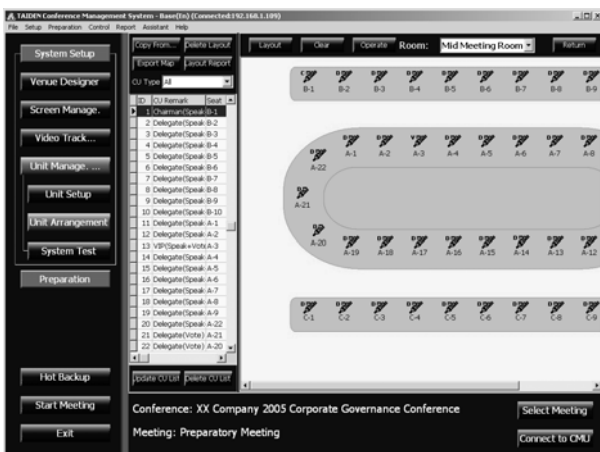
Topics and Voting



Delegate information



Display voting result



Unit arrangement

Functions

Voting management, seat arrangement and delegate management sub modules.

- Voting management:
 - ◆ Topics information management
 - Setup, save, add or delete topics file before the meeting
 - Open topics control interface and display topics content to large screen
 - Printout the topics list and information and distribute to delegates as meeting information
 - Multiple voting facilities available, suitable for various conferences, including:
 - ◇ For/Against
 - ◇ Parliamentary: YES/NO/ABSTAIN
 - ◇ Questionnaire /Opinion poll: 1/2/3/4/5
 - ◇ Audience response/Rating: --/+/0/+/>
 - Control modes: chairman control/ operator control/time controlled voting
 - Calculation: predefined or in relation to the participants attending the meeting in person
 - Register mode: nominative/ballot
 - Validity mode: first key press valid/last key press valid
 - Pass rate: between 1% and 100%
 - ◆ Display voting result to large screen
 - ◆ Clear and vivid voting result display modes (numeric/bar/pie)
 - ◆ Print or save voting result
 - ◆ Sign-in before the voting to improve the security and validity of voting result

- **Seat arrangement** facility includes delegate seating and unit arrangement function modules
 - ◆ Delegate seating is used to assign seats for the delegates, e.g.:
 - Assign a single seat for each delegate
 - Section seating, automatic seat assignment for a group of delegates, supports new assignment – in parts or entirely
 - Clear a single seat if required for a new assignment
 - ◆ Unit arrangement: assign the conference units to the corresponding positions based on the true delegate seating, current cabling and layout:
 - Unit arrangement, assign the conference units to the true delegate seating
 - Delete unit, reassign the units
 - Locate seat position by menu operation
 - Operate the arranged units to check the arrangement
- **Delegate management** includes two sub-modules: delegate information and participants
 - ◆ Delegate information: create and manage the delegate's database
 - Edit delegate information: number, type, name, voting weight, leader (yes or no), presidium (yes or no) etc. Supports individual picture in the database
 - Customer-specific options for above items
 - Supports customized delegate grouping
 - Fast search facility
 - Database updatable
 - ◆ Participants: select the delegates to participate in the conference from the database
 - List delegate information by group or by delegate type
 - Group adding function

Ordering Information

HCS-4214/20.....Voting Management Module

**HCS-4221/20
Multi-User Console Module**



The primary window of multi-user console

Functions

If more than one operator is involved, a multi-user console is available for controlling speaking and voting, apart the system application software. A maximum of 5 multi-user consoles can be connected at the same time.

Basic conference control module:

- Microphone control
- Sign-in management
- Voting management
- Connect Server
- System parameters setup and download venue files from the server

Ordering Information

HCS-4221/20.....Multi-User Console Module

HCS-4222/20 Dual PC Server Hot Spare Module



Start to backup interface



Backing interface

Functions

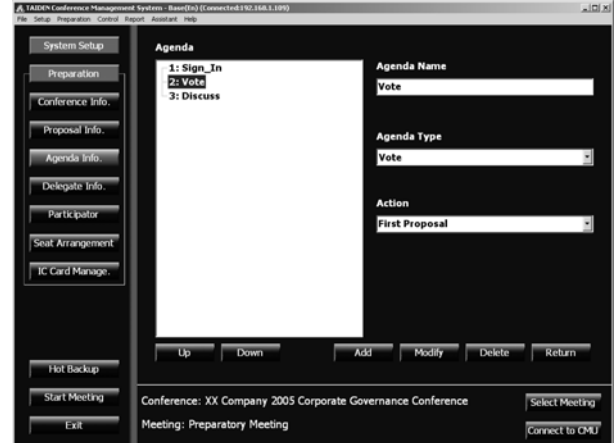
HCS-4100/20 dual PC server hot-spares is a disaster protective structure. If the main operating computer breaks down during a conference, the backup computer immediately substitutes the main computer and continues conference management.

After connection to main operating computer, the backup console application first starts an automatic backup (incl. database and conference related information). If there is any change in the database, the backup console application will update backup automatically.

Ordering Information

HCS-4222/20.....Dual PC Server Hot Spare Module

HCS-4223/20 Agenda Management Module



Agenda Information



Agenda control

Functions

Agenda is a list of meeting activities in the order in which they are to be worked off. The agenda is prepared beforehand. It may include sign-in, voting and discussion. Agenda edit prepares all activities and their sequence to ensure convenience and a well arranged course of events. Agenda Management module consists of agenda information management and agenda control sub modules.

- **Agenda information management:** edit agenda content and sequence
 - ◆ Includes agenda name, agenda type and activity
 - ◆ Sequence of each activity can be adjusted - user can add, modify, delete an activity
- **Agenda control:** control the meeting process according to the pre-defined agenda content and sequence
 - ◆ Select an agenda from the agenda list and execute it
 - ◆ List the status of each agenda
 - ◆ Agenda can be edited, added, modified, or deleted during the meeting

Ordering Information

HCS-4223/20.....Agenda Management Module