



HTD Home Audio

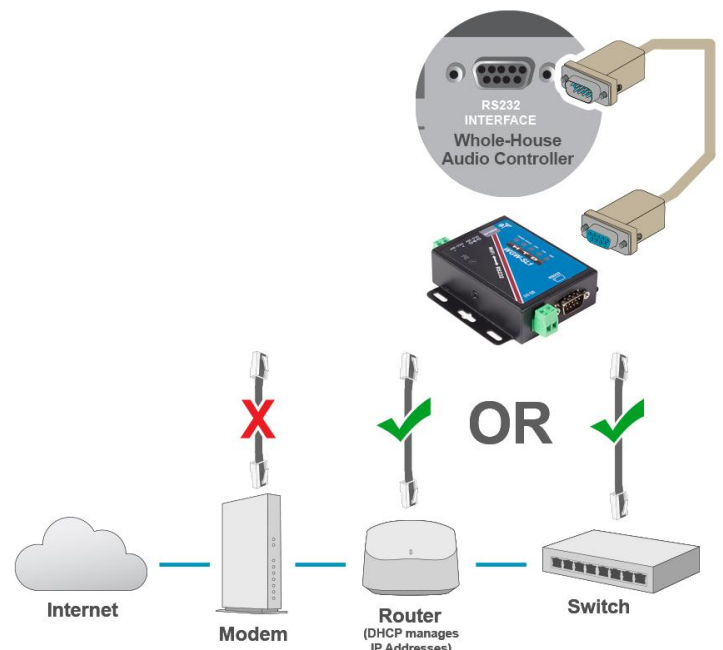
The app is designed to be intuitive for both initial set up and daily use. Here we explain in detail the features and settings. The HTD Home Audio app is compatible with all versions of the following whole-house audio controllers made by HTD: Lync 6, Lync 12, MC-66, and MCA-66. Not all features are available to every model.

CONNECTING THE GATEWAY

Prior to using the app, you must first connect your whole-house audio controller to your home's network using a compatible gateway – model GW-SL1 or WGW-SL1. The gateway uses your home's WiFi network to allow communication between your smart phones and tablets and your whole-house audio system. It is imperative that the gateway be connected to the same network as your home's WiFi.

Most of our customers use a router to manage DHCP that is separate from, but connected to, the modem provided by their Internet Service Provider. If connecting the gateway, model GW-SL1 or WGW-SL1 (latest version), with an ethernet cable, make sure it is plugged into the router or a network switch connected to the router. **Do not plug the gateway into an open port on the modem or the app will not find it.**

Model WGW-SL1 also provides the option to connect the gateway wirelessly to your network. For instructions, please see the addendum to this manual.



Whether you connect the gateway wirelessly or with an ethernet cable, **you need a single WiFi network to keep your smart phones and tablets connected to the whole-house audio system.** Make sure the modem is set to “bridge mode” and that only the router is using DHCP to manage IP addresses. **DHCP should be turned off on all access points.**

THE FIRST TIME YOU OPEN THE APP

Automatic connection to your system - As long as your WGW-SL1 or GW-SL1 gateway is connected to the same network as your phone or tablet, the app will nearly always automatically find the gateway and connect to it:

1. The very first time you launch the app, your phone or tablet will likely present a pop-up window asking you to allow the app to access devices on your network. **You must agree to this, then press “Scan Again” to complete a full network search.**
2. If a compatible gateway is discovered, the app will display the IP address of the gateway under “Systems Nearby”. If you have more than one system on the same network, the app will detect more than one compatible gateway. Click on the information icon ⓘ to display the MAC address of the gateway. Confirm it matches what is printed on the QR sticker found on the bottom of the gateway connected to the system you want to control.
3. Click on the IP address and change the name of the system if you’d like. The default is “My House”, but you can edit it to anything you’d like. Select “OK” and you can begin controlling the whole-house audio system.

Manual connection to your system – while rare, some WiFi routers can be set up in a way that blocks the app’s ability to automatically find the gateway. If you are certain that the gateway is connected to the same network that your phone or tablet is connected to, and the app does not auto-discover it, you can connect manually:

1. Click on “connect manually” found near the bottom of the app’s intro page.
2. Enter the IP address of the gateway. *See below if you do not know the IP address your router assigned to the gateway.
3. Enter the Port number. The default value for models GW-SL1 and WGW-SL1 is 10006.
4. Enter the MAC address of the gateway. The method used to determine the IP address may also display the MAC address. It may also be printed on the bottom of the GW-SL1 or WGW-SL1 and will start with either A4-4F-29 or A6-4F-29.
5. Give your system a name. The default is “My House”.
6. Press “Connect”.

How to identify a gateway’s IP address and/or MAC address if the app did not auto-discover it –

Make sure the device you use is connected to the same network as the gateway.

If you have an Android device . . . use the “Fing – Network Scanner” app. Look for a MAC address that begins with A4- 4F-29. Note: you cannot use Fing with an iOS device because Apple will block the MAC address.

If you have a PC . . . use “Advanced IP Scanner” found at <http://www.advanced-ip-scanner.com>. Look for a MAC address that begins with A4-4F-29.

If you have an Apple computer . . . use “LanScan”. Look for a MAC address that begins with A4-4F-29.

If you are comfortable accessing your router’s data . . . it may provide the IP address and MAC address for network connected devices, often under the heading “Connected Devices” or “Client List”. Look for a MAC address that begins with A4-4F-29.

If you have an Apple iOS device . . . sorry, you will have to use one of the options listed above. Apple iPhones and iPads block your ability to view most MAC addresses.

For troubleshooting assistance, please visit <https://www.htd.com/apphelp>.

USING THE APP

System Status – After the initial setup, the app will open to this page. It provides a great overview of the status of your entire system and provides basic control over every zone.

At any time, you can return to the System Status page by touching **ZONES** in the footer of the app. The footer is also used to quickly access **GROUPS** and **PRESETS**.

From the System Status page, you can do the following:

- Touch the **Power Button** to turn an individual zone on or off.
- Touch the **Zone Name** to go to the “Single Zone” page.
- Touch the **Source Name** to bring up a scroll wheel of your available sources. Select a source for that zone. A change in source will cause a zone that is currently powered off to automatically be powered on.
- Touch the **Volume Number** to bring up a scroll wheel displaying the volume range of 0-60. Select the volume number for that zone. Adjusting the volume of a zone that is currently powered off will cause the zone to automatically power on.
- Touch the speaker icon in the upper right corner to quickly **mute all zones** that are currently powered on. Touch it again to un-mute all zones.
- Located just below the last zone, you have the option to **turn all zones on or off**.
- If enabled and set up, **shortcuts to your favorite audio apps** are found near the top of the page. If more than six shortcuts have been added, you can slide left and right to see all of them.


Note: certain actions will not be executed when a zone has been placed in Do-Not-Disturb (DND) mode. DND is discussed in the Single Zone section below and is available only for Lync 6 and Lync 12.

Single Zone – This page appears when you tap on a zone name on the System Status page. The Single Zone page offers some additional functionality not available on the System Status page.


- Tap on the **Zone Name** to bring up a scroll wheel of all available zones. Select a different zone to control that zone.
- Tap on the **Source Name** to bring up a scroll wheel of all available sources. Select a source to hear in the zone.
- When you select the built-in ***MP3 Player** (Lync 6 and Lync 12 only) as the source – song title and album title will be displayed if that meta-data is included within the MP3 file.


 Previous Song

 Play

 Pause

 Next Song

 Replay all songs in a continuous loop

 Shuffle the order in which songs are played (only available on Lync v3)

** The MP3 Player is a simple player intended to be used as an always available, background source. It is ideal for common areas such as landscaping, a powder bath, courtyard, etc. For primary music listening, we recommend adding at least one [music streamer](https://www.htd.com/streamers): <https://www.htd.com/streamers>*

DND (Lync 6 and Lync 12 only) – Highlighting DND will put the zone into “Do Not Disturb” mode. Changes to the zone are restricted to the Single Zone page. Commands issued via a Group, Preset, or from the System Status page will be ignored. DND also warns others attempting to intercom into the zone from a keypad that the zone is in DND. The caller has the option to override DND. The zone can only be removed from DND by tapping DND again to un-highlight it.

PARTY – “party mode”. Tap to force all zones (currently not in DND) to turn on and listen to the same source currently selected for this zone. A pop-up window will ask for confirmation.

Bass and Treble – will only appear if “Show Bass / Treble Controls” has been selected in Zone Settings. Lync provides 21 detents ranging from -10 to +10 in single-unit increments; MC systems include 7 detents ranging from -12 to +12 in four-unit increments. Typically, tone controls are adjusted only once to compensate for a room’s unique acoustic characteristics and the listener’s personal taste for sound. This setting only impacts speakers connected to amplifier channels tied to the Variable Output of a zone. After setting tone controls for every zone, this feature can be toggled off in Zone Settings to prevent accidental adjustment during everyday use. However, it is okay to permanently leave bass and treble displayed if you prefer to regularly adjust them.

NOTE: Lync systems send treble and bass status to the app so the current settings are always displayed in real time. MC-66 and MCA-66 are not able to do this, but you can still adjust treble and bass. Just be aware that your first adjustment in the app may reset the value, but additional adjustments will be recorded by the central controller. Regardless of which model you own, it is always best to adjust treble and bass while listening to music within the zone.

Volume Control –

- Use the slider to increase or decrease the volume. With Lync systems, volume will adjust in real time. For MC-66 and MCA-66, volume will not begin to adjust until your finger is lifted from the volume slider.
- Touch the Volume Number to bring up a scroll wheel displaying the volume range of 0-60. Select a volume number for that zone.
- Tap the speaker volume icon to instantly mute volume within the zone. Tap it again to un-mute.

GROUPS – Groups of zones can be created and used to control multiple zones with single button commands.

How to create a Group –

1. Press “+ Add New Group” to first enter a group name. Popular groups are “Upstairs”, “Downstairs”, “Outdoor Zones”, “Kid Zones”, “Common Areas”, and “Bedrooms”.
2. Press “Add or remove zone” to bring up a list of available zones. Select the zones you want to include in the Group.
3. Press the back arrow “<” at the top left to review the zones added to the Group.
4. Touch “Create group” to be returned to the list of Groups.

Note: slide a Group name to the left to edit or delete it.

How to use a Group –

Click on the Group Name to reveal each of the zones included in the Group.

Note that if a zone in the Group is currently powered off, adjustments to source or volume that impact the zone will cause the zone to be powered on.

- **Group control** – Use the six buttons near the bottom of the page to:
 - VOL - and VOL +: Relatively and simultaneously lower or raise the volume of all zones in the Group.
 - SET VOL: Use this button to bring up a scroll wheel to set all zones to the same volume number.
 - SET SRC: Use this button to bring up a scroll wheel to set all zones to the same source
 - GROUP ON: Power on all zones in the Group to their previous setting for source and volume
 - GROUP OFF: Power off all zones in the Group.

- **Individual zone control** – Control of individual zones within the group is also possible.
 - Touch the power icon to turn a zone on or off
 - Touch the Source Name to bring up a scroll wheel of available sources
 - Touch the volume number to reveal the volume scroll wheel or use the volume slider
 - Touch the Zone Name to go to the Single Zone page for that zone

PRESETS – Presets offer a powerful way to quickly set all zones or a selection of zones to a specific state. Think of them as an “audio scene” that can be executed with a single button press. Examples of presets include “Morning”, “Everyday Listening”, “Loud Party”, “Dinner Party”, “Quiet Time”, “End of Day”, etc.

When you click on “+Add New Preset” and toggle on a zone, that zone will display its current state. While you can adjust the zone before saving the preset, best practice is to have first set the source and volume for every zone you’d like included in the preset using the System Status page. In this way, when you go to create a preset, those zones only need to be selected for inclusion in the preset because the source and volume level are already exactly where you’d like them to be.

How to create a preset –

1. Press “+ Add New Preset” to first enter a Preset name such as “Quiet Party”. Press “return” on your device’s keyboard to save the name.
2. Press the toggle switch for any zone you’d like included in the preset. **This should not be confused with whether the zone will be powered on or off.** It simply indicates that this zone will be impacted by the preset. Zones that are not toggled on will not be impacted when the preset is launched.
3. Press the power button for the zone to either be powered ON or OFF. Note that when the power button is not highlighted, it means the zone will be powered off.
4. Decide if the zone will be put into DND mode (Lync only) when the preset is launched. The DND setting is ignored if the zone is set to be powered off. DND only applies when a zone is powered on.
5. Touch the Source Name to select the source for the zone.
6. Touch the Volume Number to set the volume level.
7. Once all the zones have been set up, press “Create preset”.

Note: slide a Preset name to the left to edit or delete it.

How to use a preset –

Simply click on a Preset Name to apply it. The app will return to the System Status page along with a message confirming the Preset was applied successfully. Remember, presets only impact the zones that were toggled on in the preset. Zones previously placed into DND mode will not be impacted by a preset.

CUSTOMIZING THE APP

Main Menu – Touching the three horizontal bars in the upper left, sometimes referred to as a “hamburger menu” because of the way it looks, reveals a slide-out menu that allows you to quickly switch between two HTD systems on the same network and customize the selected system.

Initial unlock code – Whenever you add the HTD Home Audio app to a new device, access to custom settings will be locked. We provided your initial unlock code via email at the time you ordered your system. The initial unlock code is necessary to prevent others with access to your network from making unwanted changes.

If you cannot find your initial unlock code, the app provides the option to scan the QR code found on the bottom of your gateway to get it.



Zone Settings –

Show Bass / Treble Controls – When toggled on, the option to adjust bass and treble will appear on the Single Zone page for every zone. See [*Bass and Treble under Single Zone for details.*](#)

Display on this device – When toggled on, the zone will appear on the phone or tablet.

- You should toggle off any zone that is not being used, e.g. toggle off zone 6 if you are only using 5 zones.
- Since every phone and tablet can be uniquely customized, you might choose to toggle off zones that you do not want the owner of the tablet or phone to easily access. Example: you might toggle off all zones except those you want your child or guest to control.
- Note that Party Mode, ALL ON, and ALL OFF will still impact every zone. Groups and Presets created BEFORE a zone is toggled off will still display and impact the zone. However, the zone will not be available to add to a Group or Preset whenever it is currently toggled off.

Tap zone to edit – tap the zone name to customize it. For easy reference, the zone number will always be displayed to the left of the zone name in this list. The zone number will NOT appear on the System Status page or within Groups or Presets.

- **Zone name as it appears on THIS DEVICE** – tap to enter a custom name for the zone as it will appear on the phone or tablet; maximum 16 characters. When editing, you must click on “return” in your device’s keyboard to save it. If you previously used a different HTD app and added custom names to appear on keypads, the app may initially bring those zone names into this field to save you time. Otherwise, you will see the defaults of “Zone 1”, “Zone 2”, etc.
- **Zone name as it appears on KEYPADS (Lync systems only)** – tap to enter a custom name for the zone as it will appear on a LyncPad or LyncTouch keypad; maximum 10 characters. When editing, you must click on “return” in your device’s keyboard to save it. If you previously used a different HTD app and added custom names to appear on keypads, the app may initially bring those zone names into this field to save you time. Otherwise, you will see the defaults of “Zone 1”, “Zone 2”, etc.
- **Balance level** – use this slider to set the relative volume level of speakers within the zone that are connected to amplifier channels set to reproduce the left or right side of a stereo recording.
- **Display source on keypad(s) in this zone?** (Lync 6v3 and Lync 12v3 ONLY) – Toggle off any source you do not want included in the list of sources displayed on a keypad installed **in this zone**. Be aware that the app or another keypad (via Party mode) can still select the source to be heard in that zone. When this occurs, a

keypad will display the first source name not hidden by the app for that zone. See the “TIP” below if you do not want a source to display on **all** of your keypads.



Source Settings –

Display on this device – When toggled on, the source will appear on the phone or tablet.

- You should toggle off any source input that does not have a source connected to it.
- Since every phone and tablet can be uniquely customized, you might choose to toggle off sources that you do not want the owner of the tablet or phone to easily access. Example: you might toggle off a bedroom TV except on devices used by those who use that bedroom.

Name on keypads – tap to enter a custom name for the source as it will appear on a LyncPad or LyncTouch (Lync systems only) maximum 10 characters, or KC7 purchased after Feb, 2016 (MC and MCA systems only) maximum 5 characters. When editing, you must click on “return” in your device’s keyboard to save it.

TIP for Lync only: We highly recommend entering “None” for “Name on keypads” for every source input that does not have a source connected to it. Doing so will automatically remove that source from appearing in the source list on all keypads.

If you previously used a different HTD app and added custom names to appear on keypads, the app may initially bring those source names into this field to save you time. Otherwise, you will see the defaults of “Source 1”, “Source 2”, etc. (Lync systems) or “SRC 1”, “SRC 2”, etc. (MC and MCA systems).

The first time you enter a custom name for the “name on keypad”, the app will automatically copy the name to the “name displayed on this device” to save you time. You can overwrite or edit the name for your device at any time.

Name displayed on this device – tap to enter a custom name for the source as it will appear on the phone or tablet; maximum 16 characters. When editing, you must click on “return” in your device’s keyboard to save it. If you previously used a different HTD app and added custom source names to appear on keypads, the app may initially bring those source names into this field to save you time. Otherwise, you will see the defaults of “Source 1”, “Source 2”, etc.



Shortcut Settings – If you've connected at least one music streamer to your system, you'll benefit from adding shortcut buttons from a list of 50+ popular music services and apps. Shortcuts make it easy to toggle between what you want to hear (selected within the music service app) and where you want to hear it (selected within the HTD Home Audio app).

Assuming you’ve previously downloaded the app to your phone or tablet, tapping on a shortcut will open the app. *Note that the first time you use a shortcut, your phone or tablet may ask you to allow the HTD Home Audio app to open it.* When you are finished using the music service app, tap “Home Audio” located in the upper left corner of your screen to return to the HTD Home Audio app.

Enable Feature – When toggled on, shortcuts you’ve added will appear in the header of every page in the HTD Home Audio app. A maximum of six shortcuts will be displayed at any one time. If you’ve added more than six, simply slide the shortcuts temporarily to the left to reveal the others.

Add shortcut – click to add a new shortcut to the phone or tablet. Shortcuts are displayed in the order in which they have been added. Select from the list of shortcuts or tap on “Your Image – Make One” to create a shortcut. Not all apps provide the necessary information required to create a shortcut. *Read more here:*

<https://www.htd.com/shortcuts>.



System Settings – View unique identifiers associated with your system and access important functionality like Backup and Restore.

Gateway ID – displays the unique MAC address of your GW-SL1 or WGW-SL1.

Gateway IP – displays the IP address assigned to your gateway by your network router.

Controller – displays the model number of your whole-house audio controller.

System Name – displays the unique name you gave your system. Tap on the name to bring up your device's keyboard if you would like to edit the system name. Tap outside of the keyboard when done.

Backup and Restore – You can backup and restore custom data for your system using our free cloud storage. This is a powerful tool that makes it easy to copy settings from one device to another. While every phone or tablet used with the system can be uniquely customized, **only one phone or tablet needs to start from scratch**. For details, see “Addendum: Backup and Restore Feature” near the end of this manual.

Lock Status – displays whether the user of the device will need to enter a numeric 4-digit code to access and edit custom settings. Phones and tablets used by guests and children will often benefit from having custom settings locked.

Change Lock Password – Tap on this button to create your own numeric 4-digit unlock code. **WARNING: Once you do this, the initial unlock code will no longer work.** Should you forget your unique code, the only way to access custom settings will be to completely delete the app from the device and re-load it from the app store. At this point, the initial unlock code will once again work, but of course, you will have lost all of your custom settings. However, if you previously created a BACKUP of your custom settings, you could easily RESTORE them – see the addendum describing the “Backup and Restore Feature” for details.

Clear App Settings – tapping “CLEAR CACHE” will remove the whole-house system and all of its data including custom names, groups, presets, and shortcuts from the app. It does not remove data stored within the whole-house audio controller or any of the keypads. Consider carefully before tapping on this feature.



Feedback – We want this app to be perfect and are open to your ideas and suggestions! Click the Feedback button to quickly send us an email.



Home – This allows you to return to the initial setup page.

Systems Nearby – displays systems that the app has discovered on the same network to which your phone or tablet is currently connected.

Stored Systems – displays all of the systems you have previously set up using the app, including those not on the same network to which your phone or tablet is currently connected. This feature is primarily beneficial to users with a second home or office, or to custom installers who manage systems located at multiple addresses.

If you are attempting to connect to a system that is displayed on the Stored Systems page but not on the Systems Nearby page, the chances are good that your phone or tablet is currently not connected to the same WiFi network as the system's gateway. Check your device's WiFi settings.

Visit this page for additional assistance: <https://www.htd.com/apphelp>.



Addendum: Backup and Restore Feature

The HTD Home Audio app allows you to save your custom settings to our free cloud. Customized settings are stored and later retrieved based on a phone number you enter. Two backup profiles are allowed per phone number. In most cases, the primary user will customize his/her app and then create a backup.

The backup data can be restored to phones and tablets used by other users of the home audio system. So, while every phone or tablet used with the system can be uniquely customized, you only need to start from scratch with one phone or tablet.

Below are the steps to back up custom settings from one phone and restore them to another. For simplicity, let's refer to the primary user as George and another user as Elaine:

BACKUP

- George downloads the "HTD Home Audio" app to his phone or tablet.
- The first time he goes to any custom setting, George is required to enter a 4-digit "initial unlock code". This code was provided via email at the time his order was placed. The initial unlock code can also be retrieved by using the app to scan the QR code found on the back of the gateway (model GW-SL1 or WGW-SL1).
- George then customizes the app with Zone Names and Source Names both as displayed in the app and as displayed on keypads. George adds Shortcuts, Groups and Presets.
- George goes into System Settings and selects Backup 1 (or Backup 2).
- George is asked to enter a phone number that can receive text messages (SMS).
- For security, George may be asked to verify he is not a robot.
- George's phone will receive a text message with a 6-digit number that he enters into the app to confirm he is the owner of that phone number.
- George is warned that the backup will overwrite any previous backup he saved to the cloud. Upon confirmation, George's custom settings are backed up to our free cloud.

RESTORE

- Elaine downloads the "HTD Home Audio" app to her phone or tablet and enters the same 4-digit initial unlock code.
- Elaine goes into System Settings and selects Restore 1 (or Restore 2).
- Elaine is asked to enter a phone number that can receive text messages (SMS). Elaine enters the **SAME PHONE NUMBER GEORGE USED TO BACK UP HIS SETTINGS.**
- Elaine may be asked to verify she is not a robot.
- George is provided with a 6-digit number via text message to his phone. Elaine enters that number into her app to confirm she has legitimate access to that profile.
- Elaine is warned that the data will overwrite her current settings. Upon confirmation, her app will now look like George's app.

At this point, Elaine's phone or tablet can be customized uniquely for her, and she has the option to create her own Backup Profiles using her own phone number.

Addendum: How to Attach the WGW-SL1 Wirelessly to Your Home's Wi-Fi Network

The WGW-SL1 will broadcast its own Wi-Fi network (AP Mode) until you adjust its settings to wirelessly “attach” to your existing Wi-Fi network. Make sure the gateway is within the range of your existing Wi-Fi network.

1. After you have attached the antenna and connected the RS-232 cable between the gateway and controller, plug the WGW-SL1 into an electrical outlet.
2. Use a computer, smart phone or tablet to search for available Wi-Fi networks. Select the network labeled “WGW-SL1” and press the “Connect” button. *If you do not see this network, reset the WGW-SL1 by depressing the button near the antennae for 10 seconds while the unit is powered on.*
3. Open a web browser and enter 10.10.100.254 as a website address. A pop-up window will appear requesting username and password. Enter “admin” in both fields and log in.
4. You should now be viewing the WGW-SL1 configuration pages. In the section titled, “Working Mode Configuration”, select “STA Mode” and press “Apply”.
5. IMPORTANT: In this step, please **ignore “Restart button in Device Management”**. Instead, click on “STA Interface Settings”. Under “STA Interface Parameters”, click on the “Search” button.
6. Choose your Wi-Fi network from the list of available wireless networks and click “Apply”. A window will pop up stating, “Please Input Key!”. Select OK or Close.
7. Now that you are back on the “STA Interface Parameters” screen, enter your WiFi network’s password or pass phrase in the area labeled, “Pass Phrase” and click “Apply”.
8. This time, you will click on “Restart button in Device Management”. On the Device Management page, under “Restart Module” press “Restart”. This will cause the WGW-SL1 to reboot.
9. Wait about 60 seconds and then close the browser window (even though it may still display “Rebooting”).
10. The WGW-SL1 should now be accessible in your Wi-Fi network. It is okay to unplug or lose power to the WGW-SL1. The settings are maintained so that the next time power is restored, it will automatically reconnect to your Wi-Fi network.

Step 4.

Working Mode Configuration

You may configure the Uart-WIFI module wifi mode and data transfer mode.

AP Mode: Access Point

STA Mode: Station Mode

Data Transfer Mode Transparent Mode

Step 5.

STA Interface Setting

You could configure STA interface parameters here.

STA Interface Parameters	
AP's SSID	<input type="text" value="WGW-SL1"/> <input type="button" value="Search..."/>
MAC Address (Optional)	<input type="text"/>
Security Mode	OPEN
Encryption Type	NONE

Step 7.

STA Interface Setting

You could configure STA interface parameters here.

STA Interface Parameters	
AP's SSID	<input type="text" value="Your SSID"/> <input type="button" value="Search..."/>
MAC Address (Optional)	<input type="text"/>
Security Mode	WPA2PSK
Encryption Type	AES
Pass Phrase	<input type="text" value="Your Password"/>