EOS|HD®

Wireless Drive-Thru Headset System with HD Audio

Installation Instructions
IMPORTANT NOTICES

FCC Regulation

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communication. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Changes or modifications not expressly approved by HM Electronics, Inc. could void the users authority to operate this equipment.

The antenna(s) used for the base transmitter must be installed to provide a separation distance of at least 7.87 inches (20 cm) from all persons, and must not be co-located or operating in conjunction with any other antenna or transmitter.

This device has been designed to operate with the antennas or antenna kits listed below, and having a maximum gain of 2dBi. Antennas/Kits not included in this list or having a gain greater than 2dBi are strictly prohibited for use with this device. The required antenna impedance is 50 ohms.

1. Antenna: NEARSON, S181TR-2450R, 2dBi
2. Antenna Kit: HME, EC20 (P/N G28493-1), 0dBi
3. Antenna Kit: HME, EC10 (P/N G27706-1)

Industry Canada (IC)

This device complies with Industry Canada license exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device.

This device complies with Health Canada’s Safety Code. The installer of this device should ensure that RF radiation is not emitted in excess of the Health Canada’s requirement. Information can be obtained at http://www.hc-sc.gc.ca/ewh-sem/pubs/radiation/radio_guide-lignes_direct-eng.php

“Changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.”

Hereby, HM Electronics, Inc. declares that the EOS|HD is in compliance with the essential requirements and other relevant provisions of Radio Equipment Directive 2014/53/EU.

Waste Electrical and Electronic Equipment (WEEE)

The European Union (EU) WEEE Directive (2012/19/EU) places an obligation on producers (manufacturers, distributors and/or retailers) to take-back electronic products at the end of their useful life. The WEEE Directive covers most HME products being sold into the EU as of August 13, 2005. Manufacturers, distributors and retailers are obliged to finance the costs of recovery from municipal collection points, reuse, and recycling of specified percentages per the WEEE requirements.

Instructions for Disposal of WEEE by Users in the European Union

The symbol shown below is on the product or on its packaging which indicates that this product was put on the market after August 13, 2005 and must not be disposed of with other waste. Instead, it is the user’s responsibility to dispose of the user’s waste equipment by handing it over to a designated collection point for the recycling of WEEE. The separate collection and recycling of waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local authority, your household waste disposal service or the seller from whom you purchased the product.
### Regulatory Model Numbers

The **EOS HD Base Station, BASE6200**, has a Regulatory Model Number of 1401.
The **EOS HD Headset, HS6200 and HS6300**, have a Regulatory Model Number of 1402.
The **EOS HD Beltpac, COM6200**, has a Regulatory Model Number of 1403.

#### Brazil


#### China

- **BASE6200 (1401)** Regulatory ID number — CMIIT ID: 2014DJ4271
- **HS6200 and HS6300 (1402)** Regulatory ID number — CMIIT ID: 2014DJ4272

#### Indonesia

- **BASE6200 (1401)** Regulatory ID number — 37991/SDPPI/2014 3710
- **HS6200 and HS6300 (1402)** Regulatory ID number — 38040/SDPPI/2014 3710

#### Korea

해당 무선설비는 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없음 이 기기는 업무용(A급)으로 전자파 장비등기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.

#### Taiwan

注意！

依據低功率電波輻射性電機管理辦法第十二條經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信規定作業之無線電信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

#### Thailand

This telecommunication equipment conforms to NTC technical requirements.

#### Vietnam

- **BASE6200 (1401)** Regulatory ID
- **HS6200 and HS6300 (1402)** Regulatory ID is exempted

#### Qatar

- **BASE6200 (1401)** Regulatory ID - ictQATAR Approval reg No. CRA/SA/2016/R-5661
- **HS6200 and HS6300 (1402)** Regulatory ID - ictQATAR Approval reg No. CRA/SA/2016/R-5662

#### Ukraine

- **BASE6200**
- **HS6200**
- **HS6300**

#### UAE

- **BASE6200**
- **HS6200**
- **HS6300**

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**REGULATORY INFORMATION**

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**REGULATORY INFORMATION**
### 有毒有害物质或元素表

**Table of Toxic and Hazardous Substances**

<table>
<thead>
<tr>
<th>部件名称</th>
<th>有毒有害物质或元素</th>
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<tbody>
<tr>
<td><strong>Names of Parts</strong></td>
<td><strong>Toxic and Hazardous Substances or Elements</strong></td>
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<tr>
<td>铅 (Pb)</td>
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<td>6200基站</td>
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<td>AC50电池充电器</td>
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<td>AC50 G28550-1</td>
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<td>453G018</td>
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<td>CCC P/S</td>
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O: 表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T11363-2006标准规定的限量要求以下。

O: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirements in SJ/T11363-2006

X: 该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006标准规定的限量要求。

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<td>(G29090-4B23)</td>
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<td><strong>耳机电路板</strong></td>
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<td><strong>PCB (G29089-1)</strong></td>
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<td><strong>电池</strong></td>
<td>O</td>
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<tr>
<td><strong>Battery (104G044)</strong></td>
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<td>电池 Battery (104G044)</td>
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General Battery Safety Instructions for Battery Models: BAT50

BATXX batteries are specifically designed only for use with product(s) offered by:
HM Electronics Inc. (HME)

SAFETY PRECAUTIONS
To ensure the safety and reliability of your Battery, follow the guidelines in this section.

Using the Battery

⚠️ WARNING!
Do Not Abuse/Modify Battery Packs
Lithium-ion cells and battery packs may get hot, explode or ignite and cause serious injury if modified or abused.

Follow the safety instructions below:

- Do not place the battery in fire or heat the battery.
- Do not connect the battery backward, so the polarity is reversed.
- Do not connect the positive terminal and negative terminal of the battery to each other with any metal object (such as a wire).
- Do not carry or store the battery together with necklaces, hairpins or other metal objects.
- Do not pierce the battery with nails, strike the battery with a hammer, step on the battery or otherwise subject it to strong impacts to shocks.
- Do not solder directly onto the battery.
- Do not expose the battery to water or salt water or high humidity, or allow the battery to get wet.
- Do not disassemble or modify the battery. The battery contains safety and protection devices which, if damaged, may cause the battery to generate heat, explode or ignite.
- The protection circuit module provided with battery packs is not to be used as a substitute for a shutoff switch.
- Do not place the battery in or near fire, on stoves or in other high temperature locations.
- Do not place the battery in direct sunlight, or use or store the battery in cars in hot weather. Doing so may cause the battery to generate heat, explode or ignite. Using the battery in this manner may also result in a loss of performance or shortened life expectancy.
- When the battery is worn out, insulate the terminals with adhesive tape or a similar non-conducting material before disposal.
- Immediately discontinue use of the battery if, while using, charging, or storing the battery, the battery emits an unusual smell, feels hot, changes color or shape or appears abnormal in any other way.

- Do not place the battery in microwave ovens, high-pressure containers or on induction cookware.
- Keep batteries out of reach of children.
- Always disconnect the battery before storing or transporting the battery.
- Always store battery in air tight flame proof container away from flammable or corrosive material.

⚠️ WARNING!
In the event the battery leaks and the fluid gets into one’s eye, do not rub the eye. Rinse well with water and immediately seek medical care. If left untreated, the battery fluid could cause damage to the eye.

⚠️ WARNING!
If the device causes abnormal current to flow, it may cause the battery to become hot, explode, or ignite causing serious injury.

Charger Types
Your battery must only be charged with a HME/Clear-Com recommended charger. Any attempt to use other types of chargers may cause an explosive reaction, fire or chemical burns. Do not assume that the physical form of another battery qualifies the charger for use with the HME/Clear-Com 104G041LF battery.

Charging the Battery
Be sure to follow the warnings listed below while charging the battery. Failure to do so may cause the battery to become hot, explode or ignite and cause serious injury.

- Do not continue charging the battery if it does not recharge as specified HME/Clear-Com User Guide, under charging instructions.
- Do not attach the battery to an external charger, power supply plug or directly to a car’s cigarette lighter.
- Always visually inspect your battery before charging and after charging.
- Always allow your battery to cool to its safe ambient temperature before charging after its previous discharge cycle.
- Do not charge battery’s on or near any flammable materials, this will help ensure that if there is a malfunction it can be contained with the least amount of damage and injury possible.

Recycling the Battery
When the battery reaches the end of its useful life, the spent battery should be disposed of by a qualified recycler or hazardous materials handler. Do not mix this battery with the solid waste stream.

If your business or household does not have a battery recycling program, go to the following URL or copy and paste the following URL into your browser, then enter your zip code for a list of recycling centers:
http://earth911.com
Directives de sécurité générales pour les modèles de batterie suivants : BAT50

Les batteries BATXX sont spécialement conçues de manière à ne pouvoir être utilisées qu'avec les produits offerts par HME/Clear-Com. Préalablement à l'utilisation ou au chargement de cette batterie, il est recommandé de lire attentivement les instructions suivantes.

**PRÉCAUTIONS**

En vue d'assurer la sûreté et la fiabilité de votre batterie, respectez les directives indiquées dans cette section.

**Utilisation de la batterie**

- **ATTENTION !** Ne pas faire un usage abusif des blocs-piles ni les modifier

Les cellules de lithium-ion et les blocs-piles peuvent devenir chauds, exploser ou prendre feu et ainsi causer des blessures graves si on en fait un usage abusif ou qu'on les modifie.

Respectez les directives de sécurité ci-dessous :

- Ne pas placer la batterie dans le feu ni la faire chauffer.
- Ne pas brancher la batterie à l'envers de manière à ce que la polarité soit inversée.
- Ne pas connecter la borne positive et la borne négative de la batterie l'une à l'autre avec un objet de métal (comme du fil de fer).
- Ne pas transporter ni entreposer la batterie avec des colliers, des épingles à cheveux et d'autres objets de métal.
- Ne pas percer la batterie avec des clous, la frapper avec un marteau, marcher dessus et la soumettre de quelque autre manière que ce soit à des impacts puissants.
- Ne pas faire de soudure directement sur la batterie.
- Ne pas exposer la batterie à l'eau ou à l'eau salée ni à une grande humidité, et ne pas la laisser être mouillé.
- Ne pas démonter ni modifier la batterie. La batterie contient des dispositifs de sécurité et de protection qui, en cas de dommages, pourraient l'amener à chauffer, à exploser ou à prendre feu.
- Ne pas utiliser le module de circuit de protection offert avec les blocs-piles en remplacement d’un contacteur d’isolement.
- Ne pas mettre la batterie dans ou à proximité du feu, sur des cuisinières ou dans d’autres endroits à température élevée.
- Ne pas placer la batterie directement au soleil ni l’utiliser ou l’entreposer dans des voitures par temps chaud. Ceci pourrait l’amener à chauffer, à exploser ou à prendre feu. D’utiliser la batterie de cette manière peut également la rendre moins performante et diminuer son espérance de vie.
- Quand la batterie est usée, isoler les bornes à l'aide de ruban adhésif ou d'un matériau non conducteur semblable avant de la jeter.
- Cesser immédiatement l'utilisation de la batterie si, en cours d'utilisation ou de chargement ou lorsqu'elle est entreposée, elle émet une odeur inhabituelle, dégage de la chaleur, change de couleur ou de forme ou semble anormale de quelque autre manière que ce soit.

- Ne pas mettre la batterie dans des fours à micro-ondes, des contenus à haute pression ou des ustensiles de cuisine à induction.
- Garder les batteries hors de la portée des enfants.
- Toujours débrancher la batterie avant de l'entreposer ou de la transporter.
- Toujours entreposer la batterie dans un contenant étanche à l'épreuve des flammes loi de toute matière inflammable ou corrosive.

- **ATTENTION !** Si la batterie fuit et que le fluide entre en contact avec l'oeil de quelqu'un, ne pas frotter l'oeil. Bien rincer à l'eau et tout de suite demander des soins médicaux. Le fluide de la batterie risque de causer des dommages à l'oeil si celui-ci n'est pas traité.

- **ATTENTION !** Si le dispositif cause la circulation d'un courant anormal, il se peut que la batterie chauffe, explose ou prenne feu et cause ainsi des blessures graves.

**Types de chargeur**

Votre batterie ne devrait être rechargée qu’à l'aide d'un chargeur recommandé par HME/Clear-Com. Toute tentative d'utiliser d'autres types de chargeurs risque d'entraîner une réaction explosive, un feu ou des brûlures chimiques. Ne pas présumer que la forme physique d'une autre batterie fait que le chargeur y correspondant peut être utilisé avec la batterie HME/Clear-Com.

**Chargement de la batterie**

S'assurer de suivre les avertissements indiqués ci-dessous au moment de charger la batterie. La batterie pourrait sinon chauffer, exploser ou prendre feu et ainsi causer des blessures graves.

- Ne pas continuer à charger la batterie si elle ne se recharge pas de la manière indiquée dans le guide de l'utilisateur HME/Clear-Com, dans la section des directives de chargement.
- Ne pas brancher la batterie à un chargeur externe, à une prise d'alimentation ou directement dans l'allume-cigare d’une voiture.
- Toujours procéder à l'inspection visuelle de la batterie avant ou après son chargement.
- Toujours laisser la batterie refroidir à une température ambiante sécuritaire avant de la charger au terme de son cycle de décharge précédent.
- Ne pas recharger la batterie sur ou à proximité de matériaux inflammables; ceci fera en sorte qu’en cas de mauvais fonctionnement, elle puisse être contenue en causant le moins de dommages et de blessures possible.

**Recyclage de la batterie**

Quand la batterie atteint la fin de sa vie utile, il devrait revenir à une entreprise de recyclage qualifiée ou à une entreprise de gestion des matériaux dangereux de s'en débarrasser. Ne pas mélanger cette batterie au courant de déchets solides.

Si votre entreprise ou votre foyer ne participe à aucun programme de recyclage des batteries, cliquez sur l'adresse URL suivante ou collez-la dans votre navigateur, puis entrez votre code postal en vue d'obtenir une liste de centres de recyclage : [http://earth911.com](http://earth911.com)
Instrucciones generales de seguridad para baterías para cada modelo de batería: BAT50

Las baterías BATXX están diseñadas específicamente para usarse solo con el(los) producto(s) que ofrezca:

HM Electronics Inc. (HME)

PRECAUCIONES DE SEGURIDAD

Para garantizar la seguridad y la fiabilidad de su batería, siga las directrices en esta sección.

Al usar la batería

¡ADVERTENCIA!
No dañe ni modifique los empaques de las baterías
Si las celdas de iones de litio y los empaques de las baterías se modifican o dañan, pueden recaentarse, explotar o incendiarse y causar heridas graves.

Siga las instrucciones de seguridad que se indican a continuación:

- No exponga la batería al fuego ni la caliente.
- No conecte la batería al revés, de modo que la polaridad estuviera invertida.
- No conecte la terminal positiva con la negativa.
- No almacene ni lleve las baterías junto con collares, horquillas u otros objetos metálicos.
- No perfure con clavos, golpee con martillo ni pise la batería, ni la someta de manera alguna a golpes fuertes.
- No suelde directamente sobre la batería.
- No exponga la batería al agua, sea dulce o salada, ni a la humedad alta, ni permita que se humedezca o se moje la batería.
- No desarme ni modifique la batería. La batería contiene dispositivos de seguridad y de protección que, si se dañan, pueden causar que la batería genere calor, explote o se incendie.
- El módulo de circuito de protección incluido en los empaques de las baterías no debe usarse como sustituto de un interruptor de apagado.
- No exponga la batería al fuego ni cerca de este, en estufas ni en lugares de altas temperaturas.
- No exponga la batería bajo la luz solar directa ni use o almaceñe la batería en un carro en climas calientes. Hacer lo anterior, podría generar que la batería genere calor, explote o se incendie. Asimismo, usar la batería de esta manera podría resultar en una pérdida de rendimiento o disminución de la expectativa de vida útil del equipo.
- Cuando la batería se desgaste, aíslé las terminales con cinta adhesiva u otro material similar que no sea conductor, antes de deshacerse de ella.
- Deje de utilizar inmediatamente la batería si, mientras la usa, carga o almacena, esta emite un olor inusual, se siente caliente, cambia de color o forma o parece anormal de cualquier otra manera.
- No coloque la batería en hornos microondas, contenedores de alta presión ni en materiales de cocina inducida.
- Mantenga las baterías fuera del alcance de los niños.
- Desconecte siempre la batería antes de almacenarla o transportarla.
- Almacénela siempre en contenedores estrictamente resistentes al fuego tejidos de materiales inflamables o corrosivos.
- No cargue las baterías sobre ningún tipo de material inflamable. Esto asegurará que, si hay una falla de funcionamiento, se pueda contener con la menor cantidad posible de daños y heridas.

¡ADVERTENCIA!
En caso de que la batería gotee y le entre el fluido en los ojos, no se los restriegue. Enjuague bien con agua y busque asistencia médica inmediatamente. Si no recibe tratamiento, el fluido de la batería podría causarle daño en sus ojos.

¡ADVERTENCIA!
Si el dispositivo causa que fluya corriente anormal, puede causar que la batería se caliente, explote o se incendie y cause heridas graves.

Tipos de cargador

Su batería debe cargarla únicamente con un cargador recomendado por HME/Clear-Com. Si intenta usar otro tipo de cargador, puede causar una reacción explosiva, incendio o quemaduras con sustancias químicas. No asuma que la forma física de otra batería permita que el cargador de esta puede usarse con la batería de HME/Clear-Com.

Cargar la batería

Asegúrese de seguir las advertencias que se describen más abajo mientras carga su batería. Si no lo hace, puede causar que la batería se caliente, explote o se incendie y cause heridas graves.

- No siga cargando la batería, si no se recarga como se especifica en la guía para el usuario de HME/Clear-Com, según las instrucciones de carga.
- No conecte la batería a un cargador externo, conector de energía ni directamente al encendedor de cigarillos de un carro.
- Inspeccione siempre visualmente su batería antes y después de cargarla.
- Deje siempre que su batería se enfríe hasta que esté en su temperatura ambiental segura antes de cargar, después de su ciclo anterior de descarga.
- No cargue las baterías sobre ningún tipo de material inflamable. Esto asegurará que, si hay una falla de funcionamiento, se pueda contener con la menor cantidad posible de daños y heridas.

Reciclar la batería

Cuando la batería llegue al fin de su vida útil, un reciclador calificado o una persona encargada de manipular materiales peligrosos deberían encargarse de desecharla. No mezcle esta batería con el flujo de residuos sólidos.

Si su negocio u hogar no tiene un programa de reciclaje de baterías, vaya a la siguiente dirección URL o pREGULATORY INFORMATION

¡ADVERTENCIA!

ix
배터리 모델의 일반적인 배터리 안전 지침: BAT50
BATXX 배터리는 다음 회사에서 제공하는 제품과 함께 사용하도록 특별히 설계되었습니다: HM Electronics Inc. (HME)

안전 주의사항
배터리의 안전과 신뢰성을 보장하려면 이 섹션의 지침을 따르십시오.

배터리 사용

경고! 배터리를 개조하거나 과도하게 사용하지 마십시오.
리튬 이온 섬 및 배터리 팩을 개조하거나 과도하게 사용하면 드거워지거나 폭발하거나 발화되어 심각한 부상을 입을 수 있습니다.

하위의 안전 지침을 따르십시오:

• 배터리를 불 속에 넣거나 가열하지 마십시오.
• 배터리를 거꾸로 연결하지 마십시오. 그럴 경우 극성이 바뀌게 됩니다.
• 배터리의 양극 단자와 음극 단자를 금속 물체(전선 등)로 서로 연결하지 마십시오.
• 배터리를 수분으로 총을 내거나, 방전으로 두드리거나, 밀거나 강한 충격을 가하지 마십시오.
• 배터리의 앞쪽 납땜하지 마십시오.
• 배터리를 물이나 바닷물 또는 높은 습도에 노출시키거나 젖지 않도록 하십시오.

• 배터리를 분해하거나 개조하지 마십시오. 배터리에는 안전 장치와 보호 장치가 포함되어 있고, 손상될 경우 배터리가 드거워지거나 폭발하거나
남화합을 수 있습니다.
• 배터리와 함께 제공되는 보호 회로 모듈은 차단 스위치의 대체품으로 사용되어서는 안됩니다.
• 배터리 설치시에는 적절한 방식으로 설치하고 사용해야 하며, 전기 공급원에 맞게 설치하고 사용에 주의하십시오.
• 배터리를 필터에 따라 무단에 담거나 사용하거나 관할자 또는 보안자에게 보내지 마십시오. 배터리가 드거워지거나 폭발하기
나 발화할 수 있습니다. 그러한 방식으로 배터리를 사용하면 화재나 장애가 발생되거나 예상 수명이 단축될 수 있습니다.
• 배터리를 다른 배터리에 담거나 놓거나 하지 마십시오.
• 배터리를 반복적으로 열거나 정기적으로 고온이나 난로에서 사용하면 배터리의 성능이 저하될 수 있습니다.
• 배터리를 보관하거나 운반하기 전에 항상 분리하십시오.
• 배터리에 직접 납땜하지 마십시오.
• 배터리에 직접 납땜하지 마십시오. 배터리는 합금이나 단자 간에 수평으로 전선과 연결하지 마십시오.
• 배터리를 사용, 충전하거나 보관하고 있는 동안, 배터리에서 이상한 배터리가 나거나 드거워지거나 색이나 모양이 변하거나 기타 비정상적인
상태를 보이는 즉시 사용을 중단하십시오.
• 전자레인지, 고압 용기 또는 인덕션 조리기구에 배터리를 넣지 마십시오.
• 배터리를 인어의 손이 닿지 않는 곳의 캐시에 두십시오.
• 배터리를 보관하거나 운반하기 전에 항상 분리하십시오.
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• 배터리를 보관하거나 운반하기 전에 항상 분리하십시오.
• 항상 건조한 곳에 보관하십시오.
• 배터리가 새어나와 액체가 눈에 들어가면 눈을 문지르지 마십시오. 물로 잘 씻은 다음 즉시 병원으로 가십시오. 치료하지 않고 그대로 두면
배터리 액체로 인해 눈이 손상될 수 있습니다.

경고!
기기에 비정상적인 전류가 흐를 경우, 배터리가 드거워지거나 폭발하거나 발화되어 심각한 부상을 입을 수 있습니다.

충전기 유형
이 배터리는 HME/Clear-Com 권장 충전기로만 충전해야 합니다. 다른 유형의 충전기를 사용할 경우 폭발 위험이 있으며 화재나 화상을 입을 수 있습니다. HME/Clear-Com 배터리용 충전기를 다른 형태의 배터리에도 사용할 수 있다고 가정하지 마십시오.

배터리 충전
배터리를 충전하는 동안 아래 명시된 경고를 따르십시오. 그렇지 않으면 배터리가 드거워지거나 폭발하거나 발화되어 심각한 부상을 입을 수 있습니다.

• HME/Clear-Com 충전기 사용 설명서의 충전 지침에 나오는 대로 충전하지 않으면 배터리를 계속 충전하지 마십시오.
• 배터리를 외부 충전기, 전원 플러그 또는 자동차의 시가 라이터에 직접 연결하지 마십시오.
• 충전하기 전에 배터리를 용액으로 깨끗이 청소하십시오.
• 방전 사이클을 거친 후 배터리를 충전하기 전에 항상 안전한 주변 온도에 맞게 식히십시오.
• 가연성 물질이 있는 곳이나 근처에서 배터리를 충전하지 마십시오. 그러면 오작동이 발생할 경우 손상이나 부상 가능성을 최소화할 수 있습니다.

배터리 재활용
배터리의 수명이 다하면 유가증권 재활용에 의해 얻어지는 수익금을 통해 납땜을 해서 배터리를 폐기 처리해야 합니다. 이 배터리가 일반 쓰레기와 함께 섞이지 않도록 하십시오.

회사나 주거지에 배터리 재활용 프로그램이 없는 경우, 다음 URL로 이동하거나 브라우저에 URL를 복사하여 붙여넣고, 배터리 재활용 센터 목록의 우편번호를 입력하십시오: http://earth911.com
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Illustrations in this publication are approximate representations of the actual equipment, and may not be exactly as the equipment appears.

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US Patent 7,920,539; 9,484,041 and 9,639,906
1. **INTRODUCTION**

The **EOS HD Wireless Drive-thru Headset System** is designed to deliver a clear drive-thru conversation for Quick Service Restaurants (QSR) around the world.

The EOS Base Station and wireless headsets offer a clear conversation with customers in the drive-thru, as well as fellow store employees using the headset’s B-Channel and a push of a button.

The **Push-to-Talk** feature is a basic headset operation that allows customer communication by holding a headset button to talk and listen. The headset button is released to disconnect (see below).

**Hands Free** headset modes allow Order Takers to communicate with customers as they would in a phone call by pressing a button once to talk to a customer at the menu. The headset automatically disconnects when the customer drives away.

**Note:** Full Duplex must be installed to work in Hands Free mode (see below).

The **Messaging System** allows store owners the option to record pre-programmed greetings to customers and detailed instructions and reminders to employees.

1.1 **Full Duplex and Half Duplex Modes**

1.1.1 **Full Duplex:**

In most Drive-Thru operations, a Menu board or Speaker Post consists of a Microphone to hear the customer talk and a Speaker so the customer can listen.

When your Base Station is configured in **Full Duplex** mode, the Microphone and Speaker can transmit audio at the same time like a telephone call. This is beneficial for increasing the ability to understand a customer and immediately respond without delay.

1.1.2 **Half Duplex:**

In this unique configuration, the Menu board or Speaker Post consists of only a single speaker. This single speaker is used to both speak to and listen to the customer. But because there is only one speaker, the Order Taker can’t speak and listen simultaneously as performed in **Full Duplex** mode.

**Half Duplex** works like a Walkie Talkie. To speak to the customer, press the headset **A button**. To listen to a customer, release the **A button**.

**Full Duplex** is the fastest and most efficient form of Base Station communication, but some circumstances may make it necessary to temporarily switch a base station to **Half Duplex** mode.

Should the microphone fail or be damaged, switching to **Half Duplex** allows the Order Taker to continue taking orders until the microphone is repaired or replaced.
2. **EQUIPMENT DESCRIPTION**

The EOS|HD is a headset system primarily for use at quick-service restaurants. The equipment shown below is standard with each EOS|HD. Optional equipment can be ordered from your local dealer.

As you unpack the EOS|HD, check the packing list for each item to verify receipt of all equipment and quantities listed.

![EOS|HD components](image)

**Optional Equipment**

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Product Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headset</td>
<td>HS6200</td>
</tr>
<tr>
<td>COM 6200 Headset and Belt-Pac</td>
<td>HS12 HD</td>
</tr>
<tr>
<td>Battery</td>
<td>BAT51</td>
</tr>
<tr>
<td>Belt for Beltpac</td>
<td>None</td>
</tr>
<tr>
<td>Headset Earmuff</td>
<td>None</td>
</tr>
<tr>
<td>Headset Earpiece Cover (disposable)</td>
<td>None</td>
</tr>
<tr>
<td>Microphone</td>
<td>DM5</td>
</tr>
<tr>
<td>Telephone Interface</td>
<td>Ti6000</td>
</tr>
<tr>
<td>Vehicle Detector Board</td>
<td>VDB102</td>
</tr>
<tr>
<td>Vehicle Detector Board (with relay)</td>
<td>VDB102R</td>
</tr>
<tr>
<td>Vehicle Detector Loop (underground)</td>
<td>VDL100</td>
</tr>
<tr>
<td>Low-Profile Speaker</td>
<td>SP2500LP</td>
</tr>
<tr>
<td>Ceiling Speaker</td>
<td>MM100</td>
</tr>
<tr>
<td>Mode Switch (dual lane)</td>
<td>MS10</td>
</tr>
<tr>
<td>Remote Speed Team Switch</td>
<td>SW2</td>
</tr>
<tr>
<td>Switcher Circuit Board</td>
<td>None</td>
</tr>
<tr>
<td>Antenna Coverage Extension Kit</td>
<td>EC10</td>
</tr>
<tr>
<td>Extended Coverage Antenna Kit</td>
<td>EC20</td>
</tr>
<tr>
<td>Remote Antenna Kit (with 6 ft / 1.83 meter cable)</td>
<td>ANT20-6</td>
</tr>
<tr>
<td>Remote Antenna Kit (with 30 ft / 9.14 meter cable)</td>
<td>ANT20-30</td>
</tr>
</tbody>
</table>

**IMPORTANT!** Before doing anything else, set up the battery charger and charge the batteries according to the instructions in section 2.3, pg. 8.
2.1 Base Station Features

The base station is the heart of the EOS|HD. It contains the circuitry through which all functions of the drive-thru headset system are channeled. External base station features are shown in Figures 2 and 3. Internal connectors and controls are shown in Figure 27, pg. 94.

2.1.1 Front Panel

- The **Display screen** contains all menu selections for installation setup and routine operation options.
- The **Menu-select** buttons are used to select options from the menu system.
- The **Help button** offers information needed should problems occur with the EOS|HD.
- The **Back button** is used to return to the previous menu display, saving any settings changes made.
- The **Activity indicators** illuminate as follows:
  - **Lane 1 activity**
    - A1 light activates when the A button is pushed on a Lane 1 headset.
    - B1 light activates when the B button is pushed on a Lane 1 headset.
    - The “car illustration” light activates when a car is present at the Lane 1 menu board.
  - **Lane 2 activity**
    - A2 light activates when the A button is pushed on a Lane 2 headset.
    - B2 light activates when the B button is pushed on a Lane 2 headset.
    - The “car illustration” light activates when a car is present at the Lane 2 menu board.
2.1.2 Rear and Side Panels

When the two **cabinet latches** located on top of the cabinet are pressed simultaneously, the cabinet opens when pulling forward and down.

The **Antenna connectors** are for screw-mounting the enclosed antennas.

The four **screw holes** are used to mount the base station on the wall.

The **reset switch** is used to perform a base station soft restart. It is located in a small hole on the right side of the base station. To depress the reset switch, push a small pointed object (such as paper clip) into the hole.
2.2 Headset and Belt-Pac Features

2.2.1 Controls and Indicators

- **Power On** — Press and release the **Power button**. A voice prompt in the headset will say “Headset #, Battery Full/Half/Low, Lane #”. If the headset was previously registered, the green Power light will turn ON.

- **Power Off** — Press and hold the **Power button** for approximately 3 seconds. A voice prompt in the headset will say “Headset off,” and the power light will turn off.

- **Volume-Up or Down Adjustment** — Press and release the volume **Δ** or **V** button. Each time you press the button you will hear a beep in the earpiece as the volume increases or decreases. When you reach maximum or minimum volume, you will hear a double beep. If you continue holding the volume **Δ** or **V** button, the beeps will continue until the button is released.
2.2.2 Correct Wearing of Headset

- Wear the headset with the microphone on your right or left side next to your mouth.
- Adjust the headband and microphone boom as needed.

![Correct wearing of the headset](image)

2.2.3 Battery Removal and Replacement

![Headset battery-release button](image)

**To change batteries:**
When a battery weakens, a voice prompt in the headset will say “Change battery.” To remove the battery, press the battery-release button and slide the battery out of the headset as shown in **Figure 7**.

**To replace batteries:**
With the HME logo facing toward the ear piece, slide the square end of the battery into the battery slot. Press firmly until the battery snaps in place.

Note: The battery will not slide into the slot if you attempt to insert it improperly. Recharge batteries according to the instructions on the next page.
2.2.4 Correct Wearing of Belt-Pac

- The headset can be worn with the microphone on either side of your head.
- Wear the headset with its cable behind your back and attach the clothing clips to your collar and shirt to keep the cable safely behind you, as shown in Figure 8.
- Hold the microphone boom at its base and adjust it so the microphone is near the side of your mouth.

![Figure 8. Correct wearing of the headset](image)

2.2.5 Battery Removal and Replacement

To change batteries:

If you hear “Battery low” or “Change battery”:

- Press the RELEASE BATTERY button on the belt clip of the pouch, and use your thumb to slide the battery from the belt-pac.
- Place the battery in the battery charger for recharging.
- Install a fully charged battery in the belt-pac.

**Note:** You do not need to remove the pouch to remove or insert the battery.
2.3 Battery Charger

2.3.1 Battery Charger Power Adapter for Use in the United States
Plug the cord from the +5VDC power adapter into the top of the battery charger as shown in Figure 10, and then plug the power adapter into an electrical outlet.

![Figure 10. Battery charger power adapter connection](image)

2.3.2 Battery Charger Power Adapter for Use Outside the United States
An international power adapter is provided with the battery charger for use in countries outside the United States. Install the necessary plug on the adapter as shown in Figure 11. Plug the cord into the battery charger and then plug the power adapter into an electrical outlet.

![Figure 11. Changing plug in international power adapter](image)
2.3.3 Battery Charging

It's a good idea to charge up to four batteries while you are installing the other equipment. Charging takes about 2.5 hours. When the batteries are fully charged, install them in the headset as shown in Section 2.2.3 and Section 2.2.5.

Procedure:

Insert batteries in the charging ports for charging. The batteries can only be inserted into the charging ports one way. If they do not slide in easily, turn them around. **DO NOT force them.** Push each battery down into a port until it snaps in place.

Battery Status Lights:

The battery status lights indicate the charging status, as shown on the battery status guide at the bottom of the battery charger front panel.

- A **YELLOW LIGHT** stays on steady next to each charging port while the port is empty.
- Insert a battery in one of the four charging ports until it clicks in place.
- A **RED LIGHT** will stay on next to a battery while it is charging.
- A **GREEN LIGHT** will go on next to a battery when it is fully charged.
- If a **YELLOW LIGHT** is on next to a battery in a charging port, it means the charge failed. If this happens:
  - Be sure the battery is pushed all the way into the port until it snaps into place to make contact.
  - Try charging it in a different port. If it charges this time, the first charging port may be defective. If the battery does not charge in the second port, replace it with another battery.
- Store up to four fully charged batteries in the storage ports.
3. PREPARATION FOR INSTALLATION

- About 3 hours are required for the installation.
- Before you begin, coordinate the time of installation with the store owner/manager to minimize disruption of business.
- Be certain electrical power is available.
- Be certain some type of compatible vehicle detector loop or other vehicle detector system has already been installed in the drive-thru lane(s).

3.1 Tools Required

- Phillips (cross-point) screwdriver, size #2
- Standard (slotted) screwdriver, ⅛ inch (3.2 mm)
- Power drill and drill-bit set
- Fish tape, 100 feet (30 meters)
- Wire cutter/stripper
- Soldering iron
- Rosin-core solder
- Electrical tape

3.2 Interference Prevention

**CAUTION:** Interference may occur if the headset system is not properly installed.

The following types of interference could occur if precautions are not taken during installation. Read this section carefully before proceeding.

3.2.1 Electrical Interference

Electrical faults in appliances and other electrical equipment can cause interference such as static, hum, crackling, buzzing and zip sounds in the headset when the system is active. Interference caused by electrical faults in lighting systems might not be noticed immediately, since most lighting systems are controlled by a timer or light sensing device.

**Faulty Wiring or Components:**

Faulty components or electrical wiring in menu boards or speaker posts can cause symptoms identical to those caused by AM interference. Remove power to the menu board or speaker post at the circuit breaker until the electrical system can be repaired.

**Improper Earth Grounds:**

Improper earth grounds in the building can cause random buzzing and zip sounds in the headset when operating in either channel A or B. Placing a surge protector between the base station AC adapter and the electrical outlet can eliminate the problem.

**In the event of an electrical power outage**

If you experience problems with your HME equipment after the electricity returns, unplug the equipment, wait 15 seconds and then plug it back in.

3.3 Hop Band: Radio Frequency Interference

**Radio Frequency Interference caused by Wi-Fi routers and Access Points**

Most Wi-Fi access points allow the administrator to set the channel and bandwidth for the system. Some systems employ an ‘Auto’ mode, in which the Wi-Fi access point will automatically select the channel. With Wi-Fi access points, it is sometimes advantageous to manually select a channel number to keep the Wi-Fi transmission at a fixed location. Common Wi-Fi channels used are 1 and 11.
In order to avoid the Radio Frequency interference caused by Wi-Fi routers and Wi-Fi access points, the EOS|HD Base Station offers three user selectable Hop Bands of radio operation. Making use of these bands can assure that base communication is always free of interference.

**Interference may be occurring if:** you’re hearing clicks and/or pops; voices break up while talking; you’re hearing a “Busy” prompt in headset when a button is pressed; the headset is flashing red lights; you’re intermittently hearing “Lane 1” in the headset. To adjust this setting, refer to instructions in Section 5.3.4.

### 3.3.1 Low Band

Using **Low Band** sets the frequency range in which the Base Station operates to the lower end of the broadcast range. If you know that the Wi-Fi access point is set to Wi-Fi channel 11, then you should set the base station to operate in ‘Low’ band so the base avoids the Wi-Fi channel 11 frequency range.

### 3.3.2 High Band

Using **High Band** sets the frequency range in which the Base Station operates to the upper end of the broadcast range. If you know that the Wi-Fi access point is set to Wi-Fi channel 1, then you should set the base station to operate in ‘High’ band so the base avoids the Wi-Fi channel 1 frequency range.

### 3.3.3 Full Band

When the EOS|HD is configured in **Full Band**, the Base uses the whole broadcast frequency range, offering the greatest opportunity for headsets to communicate with the base.

However, when in Full Band, the base can be susceptible to interference from Wi-Fi routers and Wi-Fi access points. In order to avoid this inference, the EOS|HD offers two other bands: **High and Low**.

### 3.3.4 Adaptive Frequency Hopping (AFH)

AFH stands for **Adaptive Frequency Hopping**. When the base is set in AFH Mode, the base operates in Full Band. But rather than using the Full Band indiscriminately, the base will scan all frequencies currently being used by other devices such as Wi-Fi.

Once it detects that some channels in Full Band are currently being used by other devices, it will exclude those frequencies. By doing this, the base avoids interfering with these devices.

Since the AFH mode is constantly scanning and adapting to the RF environment, it is important to make note of the following which may adversely affect performance in AFH mode:

- Extra transmissions or Wi-Fi access points may crowd the 2.4 GHz band to the point where AFH may not be able to completely utilize unoccupied channels.
- The addition of remote antennas to a system to increase coverage area may reduce the benefit of antenna redundancy. Since the system will search for occupied channels on both antennas, in this configuration it may detect that more of them are occupied.

By default, **AFH** is enabled in the CE regulated countries. By default, **AFH** is disabled in all other locations.

Hereby, HM Electronics, Inc., declares that EOS HD is in compliance with the essential requirements and other relevant provisions of R&TTE Directive 1999/5/EC. In AFH mode, EOS HD complies with European Telecommunications Standards Institute (ETSI) harmonized European standard EN 300 328. Dealers, Distributors or Installers operating in a CE regulated country that switch off or disable AFH will render the product non-compliant with the directive and will be considered the manufacturer of the product.

**CE BASE STATION ADAPTIVE FREQUENCY HOPPING**

**Background**

The HME EOS HD wireless system utilizes a Frequency Hopping Spread Spectrum (FHSS) radio in order to provide robust communications. This system operates in the unlicensed 2.4 GHz band. With the proliferation of other devices over the past few years in the same 2.4 GHz band, instances where these devices and systems can interfere with each other has greatly increased. The European Union has updated the radio standards for equipment operating in this band in an attempt to reduce interference between equipment from different manufacturers. This European Telecommunications Standards Institute (ETSI) harmonized European standard is known as EN 300 328.
4. **EQUIPMENT INSTALLATION**

These instructions are for installation of standard EOS|HD equipment and most commonly used optional equipment. Specific instructions may also be enclosed with optional equipment.

If you haven’t already done so, plug the battery charger into an AC electrical outlet and charge all of the headset batteries while the other equipment is being installed. Refer to Section 2.3, pg. 8.

4.1 **Base Station Installation**

**Things to consider before and during base station installation**

- The base station should be located where, standing with your back to the wall, you can see most of the work area where headsets will be used.
- The number of walls between the base station and where the headsets will be used should be minimized.
- Sheets of stainless steel on the walls may shield or reflect radio signals.
- Outside coverage may be needed for Speed Team (see pg. 50) operation.
- Large windows allow signals to pass freely, improving outside coverage.
- The antenna coverage area can be extended with the Remote Antenna Kit.
- Note the location of the store’s Wi-Fi access point, and avoid installing the base station within six feet.
- If a system is being replaced, it may not be desirable to use the same mounting location for the new base station, but it may be required in some cases.
- If using a power source other than that supplied by HME, the power source must provide 24 volts DC regulated to +/-5%, be capable of supplying a minimum of 50 watts of power and be “LPS” rated for safe operation of the unit. The power source must meet all applicable local regulatory requirements.
4.2 Drive-Thru Layouts

4.2.1 Single Lane Drive-thru

A typical drive thru QSR building is set up as shown in Figure 13. The area inside the CIRCLE represents the required headset communication range you will need to consider before mounting the base station. The number of walls, machinery and other obstructions between locations must be minimized.

Whether a store frequently uses Speed Team operations will also factor in the decision where to mount the base station. See Section 5.6.2, pg. 49, for more information on Speed Team.

**Location #1** (Pick Up): For Speed Team operations in the drive-thru lanes, a signal from this location would have to penetrate three walls to reach location #6. Mounting the base station at this location would NOT be optimal to reach all locations.

**Location #2** (Order Taker): Signals from the kitchen must only penetrate one wall. Two walls separate location #1 and #2, so this location MAY NOT be optimal.

**Location #3, 4 and 5** (Kitchen): Headset signals from these work areas require a minimal amount wall penetration, so these areas should be considered for optimal signal range for all locations.

**Location #6 and 7** (Seating area, Drive-thru): These areas should NOT be considered for mounting the base station. Coverage in these areas can be poor at times, regardless of the base station location.

In this event, the remote Antenna Kit may be installed to increase coverage area. See Section 4.2.9, pgs. 18 -19, for antenna installation instructions.

Discuss the location of the base station with the store owner or manager. It should be mounted less than 10 feet (3 meters) from an available electrical outlet, and away from grease and large metal objects. It should also be mounted near eye level, so the display screen will be easily visible and the control buttons will be accessible.

The base transmitter antenna(s) must not be installed near any other antenna or transmitter.

Figure 13. AC50 features and battery status guide
4.2.2 Tandem, Y-Lane or Dual Drive-Thru

For tandem, Y-lane or dual drive-thru lanes, a vehicle detector and an outside speaker and microphone will be installed for each order point, and cables pulled as described in Sections 4.3 and 4.4, pg. 20.

Figure 14. Typical tandem, Y-lane and dual drive-thru layouts
4.2.3 Install Antennas on Base Station
Locate the two enclosed antennas, and install them by screwing them onto the base station antenna connectors, as shown in Figure 15.

4.2.4 Connect Base Station Power Supply
You may have Type A or Type B power supply, as illustrated in Figure 16.
Connect the power supply to the base station and an AC electrical outlet according to the numbered instructions for your type power supply, as shown in Figure 16.
If necessary, refer to the wiring diagrams listed in Section 14, pg. 101.

Note: If using a power source other than that supplied by HME, it must provide 24 volts DC regulated to +/-5%, be capable of supplying a minimum of 50 watts of power and be “LPS” rated for safe operation of the unit. The power source must meet all applicable local regulatory requirements.
### 4.2.5 Register Headsets to Base Station

**Before you permanently mount the base station on the wall**, you must register the headsets to the base station. The registered headsets should then be Walk Tested to determine the best location to mount the base station. This helps provide the best reception and transmission to and from all the areas of use.

After each headset has been registered to a base station, the base station will recognize the headsets and differentiate between them and other electronic equipment operating on similar frequencies.

Up to 15 headsets can be registered to a base station. Replacement headsets must be registered before they can be used. When a headset is replaced, the replaced headset remains in memory. If the maximum number of 15 (in memory) is exceeded, you must clear some or all of the current registrations to free up memory and register the new headset (see **Clear Headset Registration**, next page).

**Register each headset as follows:**

*Note: Headsets must be within 6 feet (1.83 meters) of the base station while being registered.*

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Be certain all headsets or belt-pacs to be registered are turned Off, and the base station power is On. On the base station LANE STATUS display, press the <strong>Menu button</strong>.</td>
</tr>
<tr>
<td>2.</td>
<td>From the MAIN MENU, press the <strong>Register headsets button</strong>.</td>
</tr>
<tr>
<td>3.</td>
<td>From the HEADSET REGISTRATION display, press the <strong>Register headsets button</strong>.</td>
</tr>
<tr>
<td>4.</td>
<td>If you are registering only one headset or belt-pac, press the <strong>Register single button</strong>. If you are registering more than one headset, press the <strong>Register multi button</strong> and continue registering each headset, one at a time.</td>
</tr>
</tbody>
</table>
5. Activate Registration mode on a Headset by pressing the **B button** and **Power button** (red) simultaneously. After power up, release the buttons.

To activate registration on a belt-pac, put on the headset and then simultaneously press and hold the **B button + PWR button** until the two red lights flash.

The belt-pac should enter registration mode within a few seconds. To confirm, a voice prompt will say “Belt-pact #, Battery Full/Half/Low, Registration”.

6. Registration process begins when the headset or belt-pac has successfully registered, and then the assigned ID number is displayed.

   ID numbers are assigned sequentially as 0 thru 9, A, B, C, D and E.

7. Confirm that the power light on the registered headset or belt-pac displays a **steady green**.

   When you have finished registering each headset or belt-pac, press the **Back button** repeatedly until you return to the MAIN MENU or LANE STATUS display.
4.2.6 Clear Headset Registration

On the HEADSET REGISTRATION display, pressing the **Clear inactive button** will unregister only headsets that are turned off. Pressing the **Clear all button** will unregister all headsets that are registered to the base station. The base station will automatically restart.

**IMPORTANT**: If the **Clear All** option is selected, NO headsets will operate until they are re-registered. It is best NOT to use this option during store business hours.

**If you experience difficulties registering headsets**: In the USA, call HME Technical Support at 1-800-848-4468. Outside the USA, call your local HME representative for assistance.
4.2.7 Walk Test for Best Transmission/Reception

Before permanently mounting the base station, do a walk test with the base station at various locations until the best possible transmission/reception is found. To check transmission/reception, have two people walk in the area where the headsets will be used. Use the headset’s B button to communicate, and then walk past the menu board to test reception where speed-team takes place.

**Note:** If you need to extend the antenna coverage area, install a Remote Antenna Kit as described below in Section 4.2.9 (below), but do not permanently mount the antenna. Repeat the walk test, moving the antenna around the area to determine where the antenna improves transmission/reception most.

4.2.8 Mount Base Station on Wall

When you have found the best location for transmission and reception, unplug the power adapter and mount the base station at the desired location as follows.

1. Hold the base station against the wall, with its door open, and mark the wall through the four screw holes on the back of the cabinet, shown in Figure 17.

2. Set the base station down and drill four 3/16 inch (4.76mm) holes in the wall at the marked spots.

3. Insert the enclosed #6 screw anchors into the holes.

4. Screw the four enclosed screws into the anchors, leaving the screw heads 1/8 inch (3.2 mm) away from the wall.

5. Mount the base station on the wall by aligning the four screw holes in the back of the base station over the four screws. Rest the base station on the screws, and then tighten the screws to secure the base station in place.

6. Install optional switcher boards and vehicle detector boards after mounting base station on wall.

4.2.9 Install Remote Antenna Kit (if needed)

The remote antenna kit allows one of the antennas to be mounted up to 30 feet (9.14 meters) from the base station for improved coverage. With an extension cable and mounting bracket, an antenna can be mounted inside or outside to extend coverage for speed team operation. Install the remote antenna kit as follows.

1. Lay out the enclosed 30 foot (9.14 meter) antenna cable with its female connector near the base station and its male connector at the proposed area where the antenna will be mounted. Bend and align the cable to the desired position.

2. Remove electrical power from the base station.

3. Remove (unscrew) the antenna from the top of the base station.

4. Screw the female antenna cable connector onto the base station antenna connector where the antenna was removed.

   **Note:** To minimize stress on the connector, bend the cable to line it up with the base station antenna connector before connecting it.

5. Screw the antenna onto the male connector at the other end of the antenna cable.

6. Hold the enclosed antenna mounting bracket against the wall at the desired mounting location and mark the wall through the two screw holes in the bracket. It may be necessary to mount the antenna high enough to avoid a safety hazard or possible damage to the antenna.
7. Remove the bracket from the wall and drill two 3/16 inch (4.76mm) holes in the wall at the marked spots.

8. Insert the enclosed screw anchors into the holes.

9. Place the enclosed screws through the holes in the bracket and screw them into the two screw anchors to secure the bracket to the wall.

10. Remove the antenna from the antenna cable. **DO NOT** remove the antenna cable from the base station.

11. Unscrew the hexagonal nut from the antenna cable connector.

12. Insert the antenna cable connector through the hole in the mounting bracket as shown in Figure 18, and screw the hexagonal nut onto the connector to secure it in place on the bracket.

   **Note:** To minimize stress on the bracket, bend the cable to line it up with the bracket before connecting it.

13. Replace the antenna on the cable connector mounted on the wall.

   **Note:** The best transmission/reception may be achieved with the antenna perpendicular to the wall. However, if it is a safety hazard or is likely to be bumped and damaged in that position, it may be necessary for the antenna to be parallel to the wall.

14. Return electrical power to the base station and resume normal operation.

![Figure 18. Remote antenna mounting on wall bracket](image-url)
4.3 Cable Pulling

**CAUTION:** If you do not use the HME audio cable, make sure that the speaker/ microphone wires used are a twisted pair. For Full-Duplex installations, the speakers and microphones must use separate cables or audio feedback will occur.

*Never run high-voltage cables in the same conduit with audio or loop cables.*

The recommended HME audio cable has four color coded, insulated wires and a bare shield (drain) wire. It can be used to connect any component to the base station. Pull the cables (two for full-duplex, one for half-duplex) through the conduit from the speaker post or menu board into the building as follows:

- For dual drive-thru installations, repeat the steps below to route **shielded** cable from inside the building to the speaker post or menu board in each lane.
- For tandem drive-thru installations, repeat the steps below to route **shielded** cable from inside the building to the speaker post or menu board at each order point.

See Section 1.1, pg. 1, for details on both modes.

1. Run fish tape from inside the building, through the conduit to the speaker post or menu board.
2. Go outside. If you are pulling more than one cable, **mark the cables and spools for identification**. Fasten each cable to the fish tape where it comes out of the conduit, and go back inside the building.
3. Pull the fish tape and cable through the conduit into the building. Disconnect the cable from the fish tape and pull enough of it in to reach the base station.
4. Go outside again and route the cable from the outside conduit to the speaker and microphone units in the speaker post or menu board.
5. Cut the cable, leaving about 3 feet (915 mm) of slack. If more than one cable have been pulled, **mark the ends of the cables again for identification**.
6. Remove about 2 inches (50 mm) of the outer insulation from the end of each cable. Strip about ½ inch (12 mm) of insulation from each of the four wires in the cable.
7. Route all the cables together to the base station, through walls and over ceiling panels if possible. Cut off any slack cable so no coils of excess cable are left in the ceiling or elsewhere.

4.4 Outside Microphone/Speaker Installation & Cable Connections

This section describes standard, full-duplex installations, using a DM5 Microphone and SP10 Speaker. Installation requirements may vary. In dual-lane or tandem systems, speakers and microphones must be installed for each lane or order point. Refer to the wiring diagrams listed in Section 14, pg. 102.

**Note:** The DM5 requires a 3-wire connection.

First, mount the microphone against the speaker grill in the speaker post or menu board. Position it where the customer will speak directly into it. The speaker can then be installed anywhere around the microphone, as long as they are at least two feet (610 mm) apart (center to center) to avoid audio feedback.
4.4.1 Install DM5 Microphone

Typical DM5 Microphone installation involves placement of the microphone in a molded foam enclosure and mounting it inside the upper compartment of the speaker post. You will connect it to the microphone/speaker cable wires from the drive-thru headset system and fill the empty space behind the unit with acoustic foam (not provided). If the DM5 is mounted in a small area, its molded foam enclosure may need to be compressed in order to close the compartment. Follow these instructions to install the DM5 in a typical speaker post. Installation in the microphone compartment of a menu board is similar to installation in a speaker post.

1. Open the speaker post and remove any existing equipment, foam or debris. If there is an existing microphone, remove it and disconnect the microphone cable.

2. Remove the small portion of the provided foam microphone enclosure, resulting in the two pieces of foam shown in Figure 20.

3. Insert the DM5 Microphone cable through the hole in the foam enclosure, and place the microphone into the hole as shown in Figure 20.

4. Insert the removed piece of foam back into the hole in the foam enclosure to fit snugly against the back of the microphone, as shown in Figure 20.

5. Using a serrated knife, trim the foam enclosure so it is ¼ to ½ inch larger than the upper speaker post compartment (vertically and horizontally) for a compressed fit. Keep the foam pieces to fill the compartment (if needed).

6. Place the foam windscreen in front of the microphone, positioning it to cover the inside of the speaker grill as shown in Figure 21.

7. Place the foam enclosed microphone into the compartment, so the front of the microphone windscreen is flush against the metal, centered on the grill, as shown in Figure 21.

8. Splice the headset system’s microphone cable wires (new or existing) to the wires of the cable extending from the back of the DM5, according to the headset system wiring diagram. Solder the connection, and then cover the splice with shrink tubing or crimp caps.

9. Pack acoustic foam (not provided) in the empty space behind the DM5 Microphone and its foam enclosure, filling the space.

Figure 19. DM5 Microphone

Figure 20. Placement of DM5 Microphone and foam in the foam enclosure

Figure 21. Microphone unit in typical speaker post installation
4.4.2 Install SP10 Speaker

1. Strip approximately 1 inch (25.4 mm) of insulation from the end of the speaker cable, and ¼ inch (6.35 mm) of insulation from each of the two cable wires, but do not tin the wires. Connect the speaker cable wires to the connector plug as shown in Figure 22.

2. Insert the connector plug into the connector on the speaker as shown in Figure 22.

If not using the optional mounting brackets:

1. Remove the double-stick tape liner, and press the adhesive side of the gasket against the front of the speaker in the position shown in Figure 22.

2. Position the speaker inside the speaker post or menu board, with the gasket centered against the inside of the speaker grill as shown in Figure 23. The cable connector can be routed to either side. Align the opening in the gasket with the grill opening.

3. Remove both inserts from the molded foam enclosure and place the foam enclosure around the speaker. Trim foam with serrated knife if necessary. Place the removed foam inserts behind speaker to provide pressure to speaker, to ensure a good gasket seal against the speaker grill opening.
If using the optional mounting brackets:

1. Attach the brackets to the screw inserts on the sides of the speaker unit with the two Phillips (crosspoint) screws provided as shown in Figure 24.

![Figure 24. Microphone unit in typical speaker post installation](image)

2. Hold the front of the speaker centered against the speaker grill of the menu board or speaker post. Mark the menu board or speaker post through the open holes in each of the two mounting brackets on the speaker, and set the speaker aside.

3. Drill holes at the two marked spots, approximately the same size as the holes in the speaker mounting brackets.

4. Remove the double-stick tape liner, and press the adhesive side of the gasket against the front of the speaker in the position shown in Figure 24.

5. Hold the speaker inside the speaker post or menu board with the gasket against the speaker grill and the holes in the mounting brackets over the two drilled holes.

6. From outside the speaker post or menu board, place the two washers on the enclosed security screws, and insert the screws through the two drilled holes.

7. Inside the speaker post or menu board, place the locking nuts on the security screws. Tighten the nuts on the screws only enough to provide a good seal between the gasket and the enclosure.

8. Place foam around the sides and back of the speaker as shown in Figure 23.
4.5 Optional External Vehicle Detector Installation

- If an external type vehicle detector will be used, install it according to the installation instructions provided. Connect it to the base station according to the appropriate wiring diagram listed in Section 14, pg. 102. Note that the connections are different for internal and external vehicle detectors.

- For an external vehicle detector in **Lane 1**, route a cable from the detector’s output to the **J6 connector** on the audio board in the EOS|HD base station. For an external vehicle detector in **Lane 2**, route a cable from the detector’s output to the **J14 connector** on the audio board.

- Remove 4 inches (100 mm) of outer insulation from the end of the cable at the base station, and strip about ¼ inch (6 mm) of insulation from each of the color coded wires coming from the cables.

- Connect the color-coded wires to connector J6 and/or J14, pins 3 and 5 for negative vehicle detection according to the wiring diagrams listed in Section 14, pg. 102. Be sure the wires are fully inserted into each connector plug to prevent shorting the wires.

4.6 Optional HME Vehicle Detector Board (VDB) Installation

To install an HME VDB in the base station, follow the instructions below.

**Note:** In tandem systems, two VDBs will be installed in the base station, one at the “VDB LANE 1” position for Order Point #1, and one at the “VDB LANE 2” position for Order Point #2.

1. Open the base station by pushing down on the latches on top of the cabinet and VERY CAREFULLY guiding the top of the cover toward you and downward.

2. Position the three holes in the VDB over the three plastic standoffs at the upper right side (inside the base station) in the position shown on the respective wiring diagram listed in Section 14, pg. 102. Press on the VDB until the tips of the three standoffs snap through the holes in the board.

3. **If there is a switcher board**, connect the cable assembly enclosed with the VDB to the P1 connector on the vehicle detector board. Connect the other end to the J6 connector on the respective LANE 1 or LANE 2 switcher board as shown on the wiring diagrams listed in Section 14, pg. 102.

4. **If there is no switcher board**, connect the cable assembly to the P1 connector on the vehicle detector board. Connect the other end to the J10 connector (or J20 for Lane 2) on the audio circuit board as shown in the wiring diagrams listed in Section 14, pg. 102.

5. Route a cable from the underground loop(s) to the TB1 terminal block on the Vehicle Detector Board(s).

6. Close the cover on the base station, and lock it by pushing until it latches.
5. **BASE STATION SETTINGS**

5.1 **Settings Status**

1. The LANE STATUS display shows current, lane-related status information. It also lists the HME Technical Support toll-free phone number to call for service. The date and time are shown at the bottom of the screen.

   Press the **More button** at the bottom-right of the LANE STATUS display to view STATUS displays.

2. To view additional system status displays, press the **More button** at the bottom-right.

3. Continue to press **More**. The information on each STATUS display shows other base station information needed to operate the system on a network and identify its version data.

4. To view the MAIN MENU and review all of the system’s settings, press the **Menu button** at the bottom-left of any STATUS display.

**Note:**

In multiple-lane operations, the LANE STATUS display displays **Vehicle detection** for **L1** (Lane 1) and **L2** (Lane 2), and **Lane Config** displays the lane configuration setting. The **Dedicated** mode ✔ (on) or −(off) setting is also available.

See **Section 5.4.2**, pg. 40, for more information regarding **Dedicated Mode**.
5.2 Basic Installer Setups

To access the Installer Setup mode, you must have an installer password. With an installer password:

1. Press the **Menu button** on the LANE STATUS display to access the MAIN MENU.

2. Press the **More button** on the MAIN MENU to access the ADVANCED MENU.

3. Press the **Installer setup button** on the ADVANCED MENU to access the ENTER INSTALLER PASSWORD display.

4. Enter the first character of the 4-digit password in the highlighted box in the **Enter Password** field by pressing the + button to enter alphabetic characters, or the − button to enter numbers.

Press the ▶ button to move the highlight to the next position to the right. Repeat this process until all four digits of the password are entered, and then press the **Continue button** to access the INSTALLER SETUP display.

**Note**: If you make a mistake, you can use the ◄ and ▶ buttons to move the highlighted box to the necessary position and change the character entered there, or press the **Clear all button** to clear all entries and start over.

If you enter an incorrect password and then press the **Continue button**, you will see the message “Invalid password, try again”. Re-enter the password. If you enter an incorrect password three times, you will be locked out for five minutes. Afterward, you may attempt to enter the password again.

**Note**: In multiple-lane configurations, the INSTALLER SETUP display includes **Split B** settings, as well as other lane-configuration settings (not shown here).

See [Section 5.4.1](#), pg. 39, for more information.
5.2.1 Lane Configuration

To set up the base station for the appropriate drive-thru lane configuration, press the Configure Lane button on the INSTALLER SETUP display to select Single, Single/A2, Dual/Y or Tandem. If you change this setting, press the Back button to reset the base and save the setting.

- **Single** lane configurations support only one lane, speaker post and ceiling speaker.
- **Single/A2** configurations operate as a single lane base, but allow store operators to use A2 as an alternate channel for in-store communication.
- **Dual/Y** configurations support two lanes, two speaker posts and two ceiling speakers. (Only available with dual-lane bases)
- **Tandem** configurations support a single lane with two speaker posts located in line with each other. (Only available with dual-lane bases)

Notes:
- If the base is a single-lane-only base station, only Single and Single/A2 options will be available (as shown).
- If the base is dual lane capable, additional settings become available for both Lanes 1 and 2.

5.2.2 Auto-Hands-Free

In the Auto-Hands-Free (AHF) mode, transmission and reception are activated automatically when a customer arrives at the menu board or speaker post. Communication is transmitted and received simultaneously, as in a normal telephone conversation.

To set up the system to allow AHF operation, press the Auto Handsfree button on the INSTALLER SETUP display to toggle and select ✔ (on) or - (off). If you change this setting, press the Back button to reset the base and save the setting.

**Note:** Auto Handsfree is also a headset function. After selecting ✔ (on) for the AHF function on the base, you must also set the headset(s) to the AHF mode before AHF will work. Refer to Section 8.3, pg. 89, for more information.
### 5.2.3 Speaker Post

1. Select **Speaker post** on the INSTALLER SETUP display to access the SPEAKER POST display and make the necessary outside speaker/microphone settings.

![INSTALLER SETUP]

<table>
<thead>
<tr>
<th>Config lane:</th>
<th>Single</th>
<th>Single/A2</th>
<th>Configure menus</th>
<th>ClearSound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Handsfree</td>
<td>(AHF):</td>
<td>✔</td>
<td>Diagnostics</td>
<td>More</td>
</tr>
<tr>
<td>Speaker post</td>
<td>🎤</td>
<td>🎤</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Press the **Duplex button** to select **Full** or **Half** duplex operation.

> See Section 1.1, pg. 1, for information regarding duplex operation.

![SPEAKER POST]

- **Duplex:** Full, Half
- **AVC:** ✔, ✗
- **Microphone**

3. Press the **AVC button** to select the ✔ (on) or ✗ (off) option for AVC (Automatic Volume Control).

> See Section 6.3, pg. 86, for more details on **AVC**.

![SPEAKER POST]

- **Duplex:** Full, Half
- **AVC:** ✔, ✗
- **Microphone**

4. Select the type of microphone installed in the speaker post by pressing the **Microphone button** repeatedly until that microphone is highlighted. The default is DM5.

> Select the typical distance from the microphone to the vehicle in the drive-thru lane by pressing the **Distance to vehicle button** repeatedly until the correct distance is highlighted.

> Press the **Back button** to save the setting.

![SPEAKER POST MIC]

- **Microphone:** DM5, Half
- **Distance to vehicle:** 0-4 ft, 4-8 ft, 8-12 ft
5.2.4 Configure Menus

The **Configure menus** setting provides security for Message Center settings, so only managers have access to changing the settings. To adjust this setting:

1. Select **Configure menus** on the INSTALLER SETUP display.

2. On the CONFIGURE MENUS display, select a setting and highlight ✓ (on) or – (off).

   If – (off) is selected, the messages menu for that setting will be hidden from the MESSAGE CENTER MENU.

   No one will have access to those Message Center settings, unless an administrator resets the respective setting by selecting ✓.

   To save the setting, press the **Back button**.
5.2.5 ClearSound

ClearSound reduces environmental noises to improve the clarity of incoming voice transmission from the customer. ClearSound will also remove kitchen noise if enabled on the outbound audio.

1. Press the ClearSound button on the INSTALLER SETUP display to access the CLEARSOUND display.

2. To turn ClearSound noise cancellation on or off, press the Inbound Noise cancel or Outbound Noise cancel button to highlight ✓ (on) or − (off).

3. Echo cancellation reduces the echo of the operator’s voice that returns from the outside speaker back into the headset. To enable or disable echo cancellation, press the Echo cancel button to highlight ✓ (on) or − (off).

Echo cancel will automatically switch to − (off) in Half-duplex mode.

4. ANC (Automatic Noise Control) senses when a customer is speaking into the outside microphone. It reduces the incoming audio level when a customer is not speaking.

To enable or disable ANC, press the ANC button to highlight ✓ (on) or − (off).

See Section 6, pg. 86-87, for more details on Inbound Noise cancel, Outbound Noise Cancel, Echo cancel and ANC.

Press the Back button to save the settings.

Note: In multiple-lane configurations, the CLEARSOUND display will be divided by Lanes. Settings will be similar to those shown for single lane.
5.2.6 Diagnostics

1. To have the EOS|HD perform diagnostic tests of various functions, press the **Diagnostics button** on the INSTALLER SETUP display.

   **Note:** Diagnostics are typically performed with guidance from HME Technical Support.

2. On the DIAGNOSTICS display, you can press the **More button** to see additional tests on the ADVANCED DIAGNOSTICS display.

3. On the left side of either display, press the option’s corresponding button to perform that test.
### 5.3 Advanced Installer Setups

To perform the following advanced installer setups, press the **More button** on the INSTALLER SETUP display to access the ADVANCED INSTALLER SETUP display.

<table>
<thead>
<tr>
<th>INSTALLER SETUP</th>
<th>ADVANCED INSTALLER SETUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone</td>
<td></td>
</tr>
<tr>
<td>Audio Fidelity</td>
<td></td>
</tr>
<tr>
<td>Line In/Out</td>
<td></td>
</tr>
<tr>
<td>Radio options</td>
<td></td>
</tr>
</tbody>
</table>

**5.3.1 Phone**

If a telephone is connected to the base station to handle telephone orders, the system must be configured for telephone operation.

1. On the ADVANCED INSTALLER SETUP display press the **Phone button**.

2. On the PHONE SETTINGS display, select ✓ (on). If a telephone will not be used, select − (off).

3. To adjust the telephone outbound or inbound audio level, press the **Audio Out** or **Audio In** button and then press the + or − button to set the desired level.

**Note:** When setting the **Phone** function to ✓ (on), you must also select a **Phone Headset** to receive the calls (see **Phone Headset**, pg. 82). An optional Telephone Interface is also required. See Figure 39, pg. 113, Optional Equipment Wiring Diagram.
5.3.2 Audio Fidelity

If you are installing a new base station where all existing headsets are Non-HD or HD (default), you must select the respective audio fidelity.

The Non-HD fidelity setting allows the base to operate in Legacy ION mode, allowing Legacy ION non-HD headsets to register and communicate.

The HD fidelity setting offers increased clarity for a more natural sound.

If you select Automatic, the fidelity of the base will be set by the first headset registered.

Note: The fidelity setting you select will be used for all registered headsets. It is important that the fidelity setting matches the capability of the headsets to be registered with the system.

To adjust this setting:

1. Select Audio Fidelity from the ADVANCED INSTALLER SETUP display.

2. Press the Select Fidelity button repeatedly to toggle and select an option.

   Press the Back button to save the setting.

CAUTION: Making this change will require re-registering all headsets.
5.3.3 Line In/Out Routing

1. If an external audio source is connected to the base station line input, on the ADVANCED INSTALLER SETUP display, press the **Line In/Out routing button**.

2. Press the **Line In to** button to select **Inbound** for the audio from the external source to be heard in headsets and ceiling speakers, or wherever inbound audio would normally be heard.

   Select **Outbound** for the audio to be heard at the outside speaker.

3. If any device (e.g. recorder) is connected to the base station line output, press the **Line Out from** button to select whether the audio from the Ceiling speaker, Outbound audio to the outside speaker, or messages from the Message Center will be routed to the device connected to the Line Output.

**Note**: In multiple-lane configurations, the LINE IN/OUT ROUTING display will be divided by Lines. Settings will be similar to those shown for single lane.
5.3.4 Radio Options

The Radio Options allow adjustments to avoid radio frequency interference that may occur when multiple base stations are installed in close proximity to one another.

**Hop Band** includes Low, High and Full band options used to limit base station interference. See Section 3.3, pg. 11, for descriptions of the Hop Band options.

The AUX Sync option can be set to ✔ (on), so that a base station can be assigned an Auxiliary number. The Aux No (number) option is used to assign one of three auxiliary numbers (1, 2 or 3).

Because up to four base stations can be installed at one location, auxiliary numbers are sometimes required to avoid radio interference should the base stations be installed in close proximity to one another. One base station is considered Primary, and up to three more base stations can be assigned numbers 1, 2 or 3.

In a multiple base setup, use the Register Aux Base option to register a base station to a Primary base station.

Once registered, the newly registered base station can be synced and then assigned an auxiliary number to avoid radio interference (if needed).

Select the Register Aux Base option, then follow on-screen instructions to register the base station.

The Adaptive Freq (AFH - Adaptive Frequency Hopping) option can be enabled ✔ (on), allowing the base station to operate in Full Band. See Section 3.3, pg. 11, for more information on AFH mode.
5.3.5 Vehicle Tone

1. To enable an alert tone heard in all headsets when a vehicle arrives at the drive-thru lane, press the **Vehicle tone button** on the ADVANCED INSTALLER SETUP display.

2. Then, press the **Vehicle Present button** the VEHICLE PRESENT TONE display to select ✔ (on). Select − (off) to cancel the alert tone.

3. To have the alert tone repeated in 3-second intervals, until the Order Taker responds to the customer, press the **Repeat button** and select ✔ (on).

   Select − (off) to cancel the repeating alert tone, and the tone will sound only once when a vehicle arrives.

*Note:* In multiple-lane configurations, the VEHICLE PRESENT TONE display will be divided by lanes. Settings will be similar to those shown for single lane.

5.3.6 Save Installer Settings

To save all settings changes made, press the **Save installer button** on the ADVANCED INSTALLER SETUP display to save them as Installer Settings. It is highly recommended that you perform this function at the end of the installation, so that a backup is made for installation specific settings.
5.3.7 Language Selection

1. To select a preferred language, press the **Language button** on the ADVANCED INSTALLER SETUP display.

2. On the SELECT LANGUAGE display, press the **Select language button** to highlight English, Spanish or French.

   Press the **Back button**, and the base will automatically reset and switch to the newly chosen language.

5.3.8 Restore Defaults

1. To erase all installer settings and return the base station to its factory settings, press the **Restore factory defaults button** on the ADVANCED INSTALLER SETUP display.

2. To return all settings back to factory defaults, press the **Default button** on the RESTORE FACTORY DEFAULTS display. The base will automatically reset and restore defaults.

**CAUTION:** If the base station is returned to the factory default settings, English will be the set language.
5.4 Dual-Lane Installer Setup

5.4.1 Split B/Combined B

Split B/Combined B is a feature that is available when using a Dual Lane base station (Dual/Y and Tandem configurations) or a single lane base in Single/A2 mode.

In standard Dual Lane operation, a store has two lanes. Order Takers hear and talk using a headset’s A1 button (exclusively for Lane 1) or A2 button (exclusively for Lane 2).

Split B and Combined B are options that allow you to choose whether headsets on one or both lanes should hear the “B” audio.

- **Split B**: Only headsets on the same lane can hear the “B” audio.
- **Combined B**: All headsets on both lanes can hear the “B” audio.

To select either Combined or Split communication from the INSTALLER SETUP display, press the Split B button to highlight the desired mode.
5.4.2 Dedicated Mode

Dedicated mode is designed to allow order takers to focus exclusively on one lane. It is a feature that is only applicable with a Dual Lane base. When a car arrives in a lane, one tone is heard for Lane 1 and two tones for Lane 2.

With **Dedicated mode** enabled, order takers will only hear the car arrival tone for their lane. Order takers working Lane 1 will hear a single tone when a car arrives, dedicated to Lane 1 headsets only. Order takers working Lane 2 will hear two tones when a car arrives, dedicated to Lane 2 headsets only.

To set up **Dedicated mode** operation:

1. Select **Menu** on the LANE STATUS display and then select **Operator mode** on the MAIN MENU.

2. On the OPERATOR MODE display, press the **Activate dedicated mode button** to select ✓ (on).

3. When you want to return to normal operation, you must select − (off).

   If needed, press the **Dedicated HELP button** for additional information.
5.5 Network Settings

If the base station is connected to a computer network for remote access, you must enter the network data based on information from your IT support. To adjust this setting:

1. Select the **Menu** button on the LANE STATUS display, and then select **More** on the MAIN MENU.

2. Press the **Network** button on the ADVANCED MENU display to open the NETWORK SETTINGS display.

   **Note:** Some network settings changes will cause the base to automatically reset.
5.5.1 Basic Network Settings

On the NETWORK SETTINGS display, press the button for each setting you want to adjust, and make the desired changes.

To edit IP, Subnet, Gateway and DNS addresses, press the corresponding buttons to access the respective display menus, and then use the ◄ and ► buttons to move the highlight to each number you would like to change, and press the + or − button to enter the desired number.

1. DHCP allows the base to automatically acquire network settings from a DHCP server installed on the local network.

   To edit this setting, press the DHCP button to highlight ✔ (on) or − (off).

   If set to Off, the base will use static network settings entered via the NETWORK SETTINGS and ADVANCED NETWORK SETTINGS displays.

2. IP Address is the internet protocol address of the base, used to identify the base on the local network.

3. Subnet is a setting used by the base to identify whether outgoing network packets are intended for the local network or if they are intended to be routed to an external network via the gateway.

4. Gateway address is a router address on the local network used to move network packets from an external network into the local network and vice-versa.
5. **DNS1 & DNS2** are addresses of domain name servers that resolve host/domain names into IP addresses. The DNS servers are used when sending email to a mail server identified by its name.

6. **Static DNS** - Typically, DNS addresses are automatically provided by the DHCP server if the DHCP is enabled and Static DNS is disabled – (off).

   If **Static DNS** is enabled, ✓ (on), it overrides the DNS1 and DNS2 addresses supplied by the DHCP server in favor of the static addresses edited on these menus.

   To enable/disable Static DNS, press the **DHCP button**, and then press the **Static DNS button** to highlight ✓ (on) or – (off).

### 5.5.2 Advanced Network Settings

For additional advanced network settings, press the **More button** on the **NETWORK SETTINGS** display.

1. For additional advanced network settings, press the **More button** on the **NETWORK SETTINGS** display.

   The advanced network settings are explained below. Press the respective button on the **ADVANCED NETWORK SETTINGS** display for each setting you would like to view or change.
2. **Host name / Domain name** – These names combine to uniquely identify the base by name on the network. This name can be used to access the base over the network instead of using the IP address.

This feature only works if DHCP is enabled on the NETWORK SETTINGS display, a DNS server is installed on the local network and if DHCP is configured to receive updates from the DHCP server.

To enter or change host or domain name, press the **Edit host name** or the **Edit domain name** button on the ADVANCED NETWORK SETTINGS display.

On the respective Edit display, use the **Erase button** to clear unwanted characters. Use the ◄, ►, ▲, and ▼ buttons to move the highlight to a desired character, and then press the **Sel (select) button** to enter it. When you are finished, press the **Back button** to save the name.

3. **Emails** – The base is capable of sending emails to store managers when alert conditions are triggered in the store. For email settings, refer to Section 5.5.3, pg. 46.

4. **TFTP port** – This port is used for transferring audio files and updated settings files to the base and transferring reading settings files from the base. The port value is **69**, but it can be set at 0 to disable the port if necessary.

To edit the TFTP port number, use the ◄ and ► button to move the highlighted box, and then use the + and − buttons to change the number in the highlighted box.

5. **Web port** – This port is used for web access of the bases’ web pages and view control settings. The port value is **80**, but it can be set at 0 to disable the port.

To edit the web port number, use the ◄ and ► buttons to move the highlighted box, and then use the + and − buttons to change the number in the highlighted box.
6. **Data port** – This port is used for sending HME-supported commands to the base over a TCP/IC socket. The port value is **3255**, or it can be set at **0** to disable the port.

To edit the data port number, use the ◄ and ► buttons to move the highlighted box, and then use the + and − buttons to change the number in the highlighted box.

7. **Telnet port** – This port is reserved for use by HME Technical Support.

Press the More button on the ADVANCED NETWORK SETTINGS display to access the BOOTLOADER NETWORK INFO display.

If instructed by HME Technical Support to edit the Telnet port number, use the ◄ and ► buttons to move the highlighted box, and then use the + and − buttons to change the number in the highlighted box.

Bootloader information is used by HME Technical Support.
5.5.3 Email

The base can send emails to store managers when alert conditions are triggered in the store. Email settings must be entered based on network information provided by IT support.

1. To edit email settings, press the Emails button on the ADVANCED NETWORK SETTINGS display.

On the EMAIL SETTINGS display, press the Emails button to select ✓ (on) or – (off).

2. SMTP Server – This is the SMTP (mail) server which conveys your emails to the proper email addresses. You can either enter the IP address of the SMTP server or its domain name.

To enter or edit an SMTP server name, press the SMTP Server button on the EMAIL SETTINGS display.

Use the Erase button to clear a current name. Use the ‹, ›, ▲ and ▼ buttons to highlight a character, and then press the Sel (select) button to enter it in the highlighted box above.

When you are finished, press the Back button to save the name.
3. **SMTP User/password** – To make email more secure, some SMTP servers will require the use of a user name or password.

To enter or edit an SMTP user name or password, press the **SMTP User** or **SMTP Password** button on the EMAIL SETTINGS display.

Use the **Erase** button to clear a current name. Use the ◄, ►, ▲ and ▼ buttons to highlight a character, and then press the **Sel** (select) button to enter it in the highlighted box above.

When you are finished, press the **Back** button to save the name.

4. The SMTP port is usually set to 25. However, some mail servers use a different port. If it is necessary to change the SMTP port number, press the **SMTP port** button on the EMAIL SETTINGS display.

On the EDIT SMTP PORT display, use the ◄ and ► buttons to move the highlighted box, and then use the + and − buttons to change the number.
5. **Email addresses** – The Source Address is pre-set to hme-base6200-XXXXXX@hme.com.

This is the address displayed in the “From:” line on alert emails sent to selected destinations.

Destination email addresses are sent emails when the Emails option is set to ✔ (on). To change the Source Address or Destination addresses, press the **Email addresses button** available on the EMAIL SETTINGS display.

To enter or edit an email address, press the Source Address or any **Destination address button** on the EMAIL ADDRESSES display.

Use the **Erase button** to clear a current address. Use the ◄, ►, ▲ and ▼ buttons to highlight a character, and then press the Sel (select) button to enter it in the highlighted box.

When you are finished, press the **Back button** to save the address.
5.6 User Settings

User settings are for routine drive-thru operation. After the initial settings have been entered, store personnel can adjust the settings as needed. To access the user settings, press the Menu button on the LANE STATUS display. Routine user settings are accessed from the MAIN MENU.

5.6.1 Vehicle Detection

1. To test the vehicle detector function by simulating a vehicle arrival at the speaker post or menu board, select Menu on the LANE STATUS display and then press the Vehicle detection button on the MAIN MENU.

   Note: Be certain no car (or metal object) is present at the detection point.

2. Press the Mode button on the VEHICLE DETECTION display and select Override.

   A vehicle alert tone will be heard in headsets, followed by inbound audio from the outside speaker.

   If enabled, a Customer Greeter message will also be heard. To return to normal operation, press the Mode button again and select Normal.

3. If you experience a problem with vehicle detection, such as continuous inbound audio heard from the outside speaker or no alert tone when a vehicle arrives, press the Reset detector button on the VEHICLE DETECTION display. Then, press the Yes button to reset Vehicle Detector(s).

   When “Reset Completed” flashes on the display, press the Back button to exit.
### 5.6.2 Operator Mode (Speed Team)

The Operator Mode provides a **Speed Team** setting. In Speed Team operation, audio and vehicle detection are disabled at the order point.

Speed team operation is used during high-volume times. To “Speed” up the ordering process during these high volume situations, one or more order takers (the “Team”) wearing headsets will take orders directly from each car in line and relay the orders to the in-store staff to prepare orders.

When Speed Team is enabled, all audio (Inbound/Outbound) from the speaker post is shut off and all Vehicle arrival tones are disabled.

**Note:** Speed teams are only used in single or dual-lanes, not in tandem drive-thru lanes.

**CAUTION:** During Speed Team, many base station functions will be disabled. Vehicle arrival tones and the customer’s voice will not be heard in the headset.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>To start speed-team operation, press the <strong>Menu button</strong> on the base station LANE STATUS display, and then press the <strong>Operator mode button</strong> on the MAIN MENU display.</td>
</tr>
<tr>
<td>2.</td>
<td>On the OPERATOR MODE display, press the <strong>Activate Speed Team button</strong> to select ✓ (on).</td>
</tr>
<tr>
<td>3.</td>
<td>To return to normal operation, return to the OPERATOR MODE display and press the <strong>Activate Speed Team button</strong> to select − (off). Once “Reset Completed” flashes on the display, press the <strong>Back button</strong> to exit.</td>
</tr>
<tr>
<td>4.</td>
<td>Select <strong>External</strong> only if speed team will be activated from a remote switch connected to the base station. See Figure 27, pg. 95. <strong>Note:</strong> In multiple-lane operations, the <strong>Activate dedicated mode</strong> option (see Section 5.4.2, pg. 40) will also appear on the OPERATOR MODE display.</td>
</tr>
</tbody>
</table>
5.6.3 Message Center

The Message Center is a central point where messages are configured to be triggered by various events during designated time periods. Messages can be sent to customers at the speaker post or to crew members via headset or ceiling speakers.

Some messages are pre-named and pre-recorded, and all messages can be edited and/or re-recorded to meet specific requirements.

There are three types of messages: Customer Greeter, Reminder and Alert messages. The table on the next page displays the names and contents of factory pre-set messages, followed by detailed instructions of how to set up your Message Center.

**Note:** Before continuing, it is important to consider all possible time periods that Message Center messages need to be played in the store. Up to 12 time periods can be configured. When you have determined all of the time periods needed, go to the Schedule Times section of these instructions to set up the time periods for the store before continuing with the Message Center setup. The current time and date and store open and close times should also be set before other Message Center setups.

**Customer Greeter messages**

Customer Greeter messages are played when a customer arrives at the speaker post. They are typically used to greet customers and inform them of promotional items. Customer Greeter messages are pre-named but not pre-recorded, with the following exceptions: the Store Closed message and Pull Forward message (tandem drive-thrus only). All Customer Greeter messages can be renamed and recorded or re-recorded to meet store needs.

**Reminder messages** *

Reminder messages are heard in crew member headsets or ceiling speakers regarding daily tasks. Reminder messages are configured to play during scheduled time periods. There are 12 pre-named and pre-recorded Reminder messages that can be named and recorded to meet store needs. There are also three “Empty” messages that can be named and recorded as needed. Reminder messages can be sent to all crew members or targeted to specific headsets.

**Alert messages** *

- Alert messages (audio) are sent to crew members via headset or ceiling speakers to report a situation that requires attention, such as a door being left open or a customer arriving in the store. Alert messages heard by all crew members or targeted to specific headsets. There are six messages that can be triggered by switched inputs (relay contacts) and 14 messages that can be triggered by Network commands.
- Alert messages (email) can also be configured to send to designated email recipients.

* Reminder and Alert Messages can be assigned a **Low** or **High Priority**.

**Low Priority** – Low Priority messages will be interrupted during play if a car arrives at the speaker post or if a crew member presses the A or B button. Interrupted Low Priority messages will not play again until the next trigger event occurs.

**High Priority** – High Priority messages will be interrupted when a crew member presses the A or B button. Following the interruption, the message will play again.
### MESSAGE CENTER MESSAGES

<table>
<thead>
<tr>
<th>NAME</th>
<th>CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Day 1</td>
<td></td>
</tr>
<tr>
<td>All Day 2</td>
<td></td>
</tr>
<tr>
<td>Breakfast 1</td>
<td></td>
</tr>
<tr>
<td>Breakfast 2</td>
<td></td>
</tr>
<tr>
<td>Lunch 1</td>
<td></td>
</tr>
<tr>
<td>Lunch 2</td>
<td></td>
</tr>
<tr>
<td>Snack 1</td>
<td></td>
</tr>
<tr>
<td>Snack 2</td>
<td></td>
</tr>
<tr>
<td>Dinner 1</td>
<td></td>
</tr>
<tr>
<td>Dinner 2</td>
<td></td>
</tr>
<tr>
<td>Store Closed</td>
<td>Thank you for your visit, but we are currently closed. Please visit us again during our normal business hours.</td>
</tr>
<tr>
<td>Pull Forward *</td>
<td>Hello, please pull forward to the next speaker. Thanks. * (Tandem drive-thru only)</td>
</tr>
<tr>
<td>Hand Washing</td>
<td>Please wash your hands.</td>
</tr>
<tr>
<td>Sanitizer</td>
<td>Please change sanitizer solution.</td>
</tr>
<tr>
<td>DR Trash</td>
<td>Please check the dining room trash.</td>
</tr>
<tr>
<td>HACCP</td>
<td>Please complete the HACCP shift checklist.</td>
</tr>
<tr>
<td>Quality Check</td>
<td>Please complete the shift quality check.</td>
</tr>
<tr>
<td>Lot Check</td>
<td>Please complete a parking lot check.</td>
</tr>
<tr>
<td>Restroom Check</td>
<td>Please check the restrooms.</td>
</tr>
<tr>
<td>Pre-Rush</td>
<td>Please complete the pre-rush tasks for your workstation.</td>
</tr>
<tr>
<td>Post-Rush</td>
<td>Please complete the post-rush tasks for your workstation.</td>
</tr>
<tr>
<td>Headset Status</td>
<td>To check headset status, press and hold A2 and volume down while turning on the power.</td>
</tr>
<tr>
<td>Change Language</td>
<td>To change headset prompt language, press and hold A1 and volume down while turning on the power.</td>
</tr>
<tr>
<td>Hands Free ON</td>
<td>To turn headset hands free mode on, press and hold B and volume up while turning on the power.</td>
</tr>
<tr>
<td>Empty 1-3</td>
<td>Not pre-recorded.</td>
</tr>
</tbody>
</table>

### CUSTOMER GREETER

Customer Greeter messages are triggered by vehicle arrivals at the drive-thru during scheduled times for those messages to play.

### REMINDER

Reminder messages are triggered by time and day only.

### ALERT

Alert messages are triggered by input signals, time and day or Network events.

In the **EVENT** column:
- **S#** refers to a switch-triggered alert.
- **N#** refers to a Network-triggered alert.

<table>
<thead>
<tr>
<th>NAME</th>
<th>EVENT</th>
<th>CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freezer Door</td>
<td>S1</td>
<td>The freezer door has been left open.</td>
</tr>
<tr>
<td>Cooler Door</td>
<td>S2</td>
<td>The cooler door has been left open.</td>
</tr>
<tr>
<td>Back Door</td>
<td>S3</td>
<td>The back door has been left open.</td>
</tr>
<tr>
<td>Lobby Door</td>
<td>S4</td>
<td>A guest has entered the lobby.</td>
</tr>
<tr>
<td>Empty</td>
<td>S5</td>
<td></td>
</tr>
<tr>
<td>Empty</td>
<td>S6</td>
<td>Not pre-recorded.</td>
</tr>
<tr>
<td>Empty</td>
<td>N1 – N14</td>
<td></td>
</tr>
</tbody>
</table>
1. **Customer Greeter Message Settings**

1. To set the time and locations for Customer Greeter messages, or to name and record Customer Greeter messages, press the **Menu button** on the LANE STATUS display.

2. On the MAIN MENU, press the **Message Center button**.

3. On the MESSAGE CENTER MENU, press the **Customer Greeter button**.

4. On the CUSTOMER GREETER display, press the ▲ (up) or ▼ (down) **button** to highlight the desired message. Press the **Edit button** to access editing options.

5. Edit the name (optional) of the selected message by pressing the **Rename button** on the EDIT CUSTOMER GREETER display.

   On the **Rename display**, use the **Erase button** to clear characters in the current name. Use the ◄, ►, ▲ and ▼ **buttons** to move the highlight to a character. Use the **Sel (select) button** to insert each highlighted character in the name field.

   When you are finished, press the **Back button** to save the new name.
6. Enable or disable the selected message by pressing the **Message button** on the EDIT CUSTOMER GREETER display and highlight ✓ (on) or - (off).

Press the **Back button** to save the setting.

---

### Review or Record Message

1. Review the existing selected message, or record a new message by pressing the **Review/Record button** on the EDIT CUSTOMER GREETER display.

   **Note:** Reviewed messages are played to a specific headset to avoid interfering with lane operations.

2. To listen to the existing message, press the **Review button** on the REVIEW/RECORD MESSAGE display.

   Follow instructions listed under READY TO REVIEW.

   Press and hold the headset **B button** to play the message.

3. To record a new message, press the **Record button** on the REVIEW/RECORD MESSAGE display.

4. Follow the instructions listed under READY TO RECORD. Message can be recorded up to 10 seconds long. The Progress indicator will display time remaining.

   When you finish recording, release the headset **B button** and press the **Review button**.

   Follow the instructions listed under READY TO REVIEW to confirm a successful recording.
### Message Schedule

1. To choose the schedule for the selected message, press the **Schedule button** on the EDIT CUSTOMER GREETER display.

2. On the SCHEDULE CUSTOMER GREETER display, press the button for the day you want the selected message to be played.

3. On the SELECT SCHEDULE TIMES display, select the time period when you want the selected message to play by pressing the ▲ (up) and ▼ (down) buttons to scroll through the 12 available time periods.

   When the desired time period is highlighted, press the **Edit button**.

4. On the EDIT display, press the **Scheduled button** to turn the message ✔ (on) or − (off) for the selected time period.

   If you want the message to be on or off during this time period every day, press the **Apply to all days? button** to select **Yes** or **No**. If **No** is chosen, only the selected day will be affected by this change.

   Press the **Back button** to save this setting.

---

**Note**: To edit the **Start** and **Stop** times for the time periods listed on the SELECT SCHEDULE TIMES display, go to the MESSAGE CENTER MENU and select **Edit schedule times**.
Message Playback Settings

1. To edit where the selected Customer Greeter message will be heard (in addition to the speaker post), press the **Settings button** on the EDIT CUSTOMER GREETER display.

2. On the EDIT CUSTOMER GREETER SETTINGS display, press the button corresponding to the location where you would like the selected **Customer Greeter** message to be heard or not heard, to highlight ✔ (on) or − (off).

   If you select **Hear customer**: ✔ (on), you will hear the customer’s voice and the Customer Greeter message in your headset.

   If you select **Hear customer**: − (off), you will not hear the customer’s voice until the Customer Greeter message has finished playing.

3. If you would like a delay to occur after the Customer Greeter message is triggered, select **Delay** on the EDIT CUSTOMER GREETER SETTINGS display.

   On the DELAY BEFORE PLAY display, use the + and − buttons to change the number in the highlighted box, and use the ◄ or ► button to move the highlight to the opposite position.

   When you are finished, press the **Back button** to save the setting.

**Note:** Customer Greeter messages are always directed to the drive-thru speaker in addition to these settings. See **Section 5.7.1**, pg. 70. For the message to be heard at the drive-thru speaker, the outbound Customer Greeter volume must be adjusted, and then checked at the speaker post. For multiple-lane operations, see **Section 5.7**, pg. 70.
2. Reminder Message Settings

1. To set up the time periods and locations for Reminder messages to be played, or to name or record Reminder messages, press the **Menu button** on the base station LANE STATUS display.

2. On the MAIN MENU press the **Message Center** button.

3. On the MESSAGE CENTER MENU, press the **Reminder messages** button.

4. To select a message on the REMINDER MESSAGES display, press the ▲(up) or ▼(down) **button** to highlight the desired message and then press the **Edit** button.

5. To change the name of the selected message, press the **Rename button** on the EDIT REMINDER MESSAGE display.

   On the **Rename** display, use the **Erase button** to clear characters in the current name to change them. Use the ◄, ►, ▲ and ▼ buttons to move the highlight to a character you would like to use in the name.

   Use the **Sel** (select) button to enter the highlighted character in the name.

   When you are finished, press the **Back button** to save the new name.
6. To turn the selected message on or off, press the **Message button** on the EDIT REMINDER MESSAGE display to highlight either ✔ (on) or − (off).

Press the **Back button** to save this setting.

---

**Review or Record Message**

1. **To review the existing selected message, or to record a new message,** press the **Review/Record button** on the EDIT REMINDER MESSAGE display.

**Note:** Reviewed messages are played to a specific headset to avoid interfering with lane operations.

2. **To listen to the existing message,** press the **Review button** on the REVIEW/RECORD MESSAGE display.

Follow instructions listed under READY TO REVIEW. Press and hold the headset **B button** to play the message.

3. **To record a new message,** press the **Record button** on the REVIEW/RECORD MESSAGE display.

4. **Follow the instructions under READY TO RECORD on the display.** You can record a message up to 10 seconds long while you are pressing and holding the headset **B button**. The Progress indicator will show you how much time you have left.

When you finish recording, release the headset **B button** and press the **Review button** on the display, and follow the instructions under READY TO REVIEW to confirm a successful recording.
Message Priority

Reminder messages can be assigned a high or low priority. To set message priority, press the Priority button on the EDIT REMINDER MESSAGE display to highlight either High or Low. Press the Back button to save the setting.

Note: If the priority is set Low, the message may play to completion or be terminated by either an A or B button being pressed on any headset, or by a car arrival on a given lane.

If the priority is set High, the message will play to completion. If a high priority message is interrupted by an A or B button being pressed on any headset for a given lane, it will retry until it is able to play to completion.

Message Schedule

1. To choose the schedule for the selected message, press the Schedule button on the EDIT REMINDER MESSAGE display.

2. On the SELECT SCHEDULE TIMES display, select the time period(s) when you want the selected message to play by pressing the ▲(up) and ▼(down) buttons to scroll through the 12 available time periods. When the desired time period is highlighted, press the Edit button.

Note: Reminder messages are triggered to play at the beginning of their selected schedule time period(s).

On the EDIT display, press the Scheduled button to turn the message √ (on) or – (off) for the selected time period.

If you want the message to be on or off during this time period every day, press the Apply to all days? button to select Yes or No. If No is selected, only the selected day will be affected by this change.

Press the Back button to save this setting.
Message Playback Settings

1. To choose where the selected Reminder message will be heard, press the **Settings** button on the **EDIT REMINDER MESSAGE** display.

   Then, press the **Headsets** button on the **EDIT REMINDER SETTINGS** display.

2. On the **SELECT REMINDER HEADSETS** display, use the ▲(up) or ▼(down) buttons to highlight the headset registration number for the headset you would like to omit or include receiving the selected Reminder message, and then press the **Edit** button.

3. To select/deselect the headset, press the **Select headset** button on the **EDIT** display to highlight ✔ (on) or − (off).

   To select/ deselect all headsets, press the **Apply to all headsets?** button to highlight Yes or No.

   Press the **Back** button to save this setting.

4. To have the selected Reminder message heard or not heard in the ceiling speaker(s), press the **Hear in ceiling speaker** button to highlight ✔ (on) or −(off).

   To have the selected Reminder message heard or not heard in the line out(s), press the **Hear in Line Out** button to highlight ✔ (on) or −(off).

   **Note:** After selecting ✔ (on) to hear the message in the ceiling speaker or Line Out, be certain their volume is set high enough for the message to be heard. To do this, return to the MAIN MENU and select **Volume adjust** to make the necessary adjustments.
1. To have the Reminder message play repeatedly at selected intervals, press the **Repeat button** on the EDIT REMINDER SETTINGS display.

2. On the REPEAT INTERVAL display, use the ◄ or ► button to move the highlight left or right for hours, minutes or seconds (HH:MM:SS) in the Time field, and use the + and − buttons to change the number in the highlighted box.

   Setting the repeat interval to all 0’s disables repeats.

   Press the Back button to save this setting.
3. Alert Message Settings

1. To set up the time periods and locations for Alert messages to be played, or to name and/or record Alert messages, press the Menu button on the base station LANE STATUS display.

   On the MAIN MENU press the Message Center button.

2. Press the Alert messages button on the MESSAGE CENTER MENU.

3. To select a message on the ALERT MESSAGES display, press the ▲ (up) or ▼ (down) button to highlight the desired message.

   To edit a message, select the message and press the Edit button.

4. To edit the name (optional) of the selected message by pressing the Rename button on the EDIT ALERT MESSAGE display.

   On the Rename display, use the Erase button to clear characters in the current name. Use the◄, ►, ▲ and ▼ buttons to move the highlight to a character.

   Use the Sel (select) button to insert each highlighted character in the name field.

   When you are finished, press the Back button to save the new name.
5. To turn the selected message on or off, press the **Message button** on the EDIT ALERT MESSAGE display to highlight either ✔ (on) or −(off).

Press the **Back button** to save this setting.

### Review or Record

1. To review the existing selected message, or to record a new message, press the **Review/Record button** on the EDIT ALERT MESSAGE display.

**Note:** Reviewed messages are played to a specific headset to avoid interfering with lane operations.

2. To listen to the existing message, press the **Review button** on the REVIEW/RECORD MESSAGE display.

Follow instructions listed under READY TO REVIEW.

Press and hold the headset **B button** to play the message.

3. To record a new message, press the **Record button** on the REVIEW/RECORD MESSAGE display.

4. Follow the instructions under READY TO RECORD on the display. You will a maximum 10 seconds to record a message while pressing and holding the headset **B button**. The Progress indicator will countdown the seconds.

When finished, release the headset **B button**. Press the **Review button** on the display, and follow the instructions listed under READY TO REVIEW to confirm the recording.
**Message Priority**

Alert messages can be assigned a high or low priority. To set message priority, press the *Priority button* on the EDIT ALERT MESSAGE display to highlight either **High** or **Low**.

Press the *Back button* to save this setting.

**Note**: If the priority is set **Low**, the message may play to completion or be terminated by either an *A* or *B* button being pressed on any headset, or by a car arrival on a given lane.

If the priority is set **High**, the message will play to completion. If a high priority message is interrupted by an *A* or *B* button being pressed on any headset for a given lane, it will retry until it is able to play to completion.

**Message Schedule**

1. To choose the schedule for the selected message, press the *Schedule button* on the EDIT ALERT MESSAGE display.

2. On the SCHEDULE ALERT MESSAGE display, press the button for the day you want the selected message to be played.

3. On the SELECT SCHEDULE TIMES display, select the time period when you want the selected message to play by pressing the ▲(up) and ▼(down) buttons to scroll through the 12 available time periods.

When the desired time period is highlighted, press the *Edit button*. 
4. On the EDIT display, press the Scheduled button to turn the message ✔ (on) or − (off) for the selected time period.

If you want the message to be on or off during this time period every day, press the Apply to all days? button to select Yes.

If No is selected, only the selected day will be affected by this change.

**Note**: To edit the Start and Stop times for the time periods listed on the SELECT SCHEDULE TIMES display, go to the MESSAGE CENTER MENU and select Edit schedule times.

**Message Playback Settings**

1. To choose where the selected Alert message will be heard, press the Settings button on the EDIT ALERT MESSAGE display.

Then, press the Headsets button on the EDIT ALERT SETTINGS display.

2. On the SELECT ALERT HEADSETS display, use the ▲ (up) or ▼ (down) buttons to select a headset number for which you would like to turn the selected Alert message on or off, and then press the Edit button.

3. To select/deselect the headset where the message will be heard, press the Select headset button on the EDIT display to highlight ✔ (on) or − (off).

To select/deselect all headsets, press the Apply to all headsets? button to highlight Yes or No.

Press the Back button to save this setting.
4. To have the selected Alert message heard or not heard in the ceiling speaker(s), press the **Hear in ceiling speaker button** to highlight ✓ (on) or – (off).

To have the selected Alert message heard or not heard in the line out(s), press the **Hear in Line Out button** to highlight ✓ (on) or – (off).

**Note**: After selecting ✓ (on), to hear the message in the ceiling speaker or Line Out, be sure their volume is set high enough for the message to be heard. To do this, return to the MAIN MENU and select **Volume adjust** to make the necessary adjustments.

5. To set a delay after the Alert message is triggered until it begins playing, press the **Delay button**.

On the DELAY BEFORE PLAY display, use the ◄ or ► button to move the highlight left or right in the Delay field for minutes and seconds (MM:SS), and use the + and − buttons to change the number in the highlighted box.

Press the **Back button** to save the settings.

The DELAY BEFORE PLAY setting applies to both audio and email-based.

6. To have the Alert message play repeatedly at selected intervals, press the **Repeat button** on the EDIT ALERT SETTINGS display.

On the REPEAT INTERVAL display, use the ◄ or ► button to move the highlight left or right for hours, minutes or seconds (HH:MM:SS) in the Time field, and use the + and − buttons to change the number in the highlighted box. Setting the repeat interval to all 0’s disables repeats.

Press the **Back button** to save the settings.

**Note**: The repeat interval does not apply to emails, since they are not repeated for a given message.
Alert Message Email

1. To compose an email message to be sent to designated recipients when the selected Alert is triggered, select Message Text on the EDIT ALERT MESSAGE display.

2. To edit the email text, on the Message Text display, use the Erase button to clear characters if there is a current email you want to change.

   Use the ◄, ►, ▲ and ▼ buttons to move the highlight to a character you would like to use in the new email text.

   Use the Sel (select) button to enter the highlighted character in the message.

   Press the Back button to save the email text.

3. To have the selected Alert message sent to desired email addresses, press the Emails button on the EDIT ALERT SETTINGS display.

4. On the SELECT EMAIL DESTINATIONS display, use the ▲ (up) and ▼ (down) buttons to select an email address for which you would like to turn the selected Alert message on/off, and then press the Edit button.

5. To select/deselect the email destination that will receive the email message, press the Select email destination button on the EDIT display to highlight ✓ (on) or − (off).

   To select/deselect all email destinations, press the Apply to all email destinations? button to highlight Yes or No and then press the Back button.
6. To edit the selected email address, press the **Edit destination address button**.

   On the EDIT DESTINATION ADDRESS display, use the **Erase button** to clear characters in the current email address to change them.

   Use the ◄, ►, ▲ and ▼ buttons to move the highlight to a character you would like to use in the address.

   Use the **Sel (select) button** to enter the highlighted character in the address.

   When you are finished, press the **Back button** to save the new email address.
4. Message Schedule Times

1. To set up all the time periods during each day that all Message Center messages can be scheduled, press the Menu button on the base station LANE STATUS display.

On the MAIN MENU press the Message Center button.

2. Press the Edit schedule times button on the MESSAGE CENTER MENU. There are 12 possible time periods.

Note: Changing these time periods will affect all Message Center message schedules. Time periods for Scheduled Outbound Volume Settings will not be affected.

3. To select a time period to be edited, use the ▲(up) and ▼(down) buttons to scroll through the 12 available time periods.

When the desired time period is highlighted, press the Edit button.

4. On the drop-down EDIT SCHEDULE TIMES display, to edit the Start or Stop time, use the ◄ and ► buttons to move the highlight in the Start or Stop field, and use the + and − buttons to change the highlighted numbers.

Note: Times are in 24 hour format (ex: 0500 = 5 AM, 1700 = 5 PM., 0000 = Midnight, etc).

To move from one field to the other, repeat pressing the ◄ or ► button until the highlight moves from one field to the other.

Press the Back button to save these settings.
5.7 Dual-Lane Message Center Settings

5.7.1 Customer Greeter Messages

You can access Message Center Settings by pressing the Menu button on the LANE STATUS display, and then pressing the Message Center button. Settings can be found under Section 5.6.3, pg. 51.

1. In dual-lane operations, Customer Greeter messages can be set to play to Lane 1, Lane 2 or both.

   Press the Edit button on the CUSTOMER GREETER display, and then press the Event button to highlight Lane 1, Lane 2 or Lane 1/2.

5.7.2 Reminder Messages

In dual-lane operations, Reminder messages can be set to play through the ceiling speaker and Line Out for Lane 1, Lane 2 or both.

   Press the Settings button on the EDIT REMINDER MESSAGE display.

   On the EDIT REMINDER SETTINGS display, press the Hear in ceiling speaker or Hear in Line Out buttons to highlight Lane 1, Lane 2 or Lane 1/2.
5.7.3 Alert Messages

In dual-lane operations, Alert messages can be set to play in the ceiling speaker and Line Out for Lane 1, Lane 2 or both.

Press the Settings button on the EDIT ALERT MESSAGE display and then, on the EDIT ALERT SETTINGS display, press the Hear in ceiling speaker and Hear in Line Out buttons to highlight Lane 1, Lane 2 or Lane 1/2.

Note: In multiple-lane configurations, the VOLUME MENU display will be divided by Lanes. Settings will be similar to those shown for single lane.

5.7.4 Volume Adjustments

Adjust the volume for inbound and outbound audio, customer greeter messages, ceiling speaker and vehicle tones, or schedule outbound audio levels.

1. On the LANE STATUS display, select Menu and then, on the MAIN MENU select Volume adjust to access the settings.

2. Press the button on the left side of the VOLUME MENU to select which volume you want to adjust.
1. **In/Out-bound Audio Volume**

1. On the IN/OUTBOUND VOLUME display, select which volume you would like to adjust, and then use the + and − buttons to raise and lower the volume level.

The first two settings adjust the audio level to and from the outside speaker/microphone and the third setting will set the level of the outbound Customer Greeter message.

When a volume is set to 0, the function is turned off. For dual-lane operations, these settings will be available for Lane 1 and Lane 2.

2. To schedule automatic volume level changes to the outside speaker, select Schedules and then Settings.

   **Note:** This Outbound audio level will be active whenever any scheduled outbound audio level is not enabled.

**Schedules**

1. There are 7 possible time periods. These time periods will only apply to scheduled outbound volume level settings. They will not affect other message schedules.

   To select a time period to be edited, use the ▲(up) and ▼(down) buttons to scroll through the available time periods. When the desired time period is highlighted, press the Edit button.

2. On the drop-down EDIT SCHEDULE TIMES display, to edit the Start or Stop time, use the ◄ and ► buttons to move the highlight in the Start or Stop field, and use the + and − buttons to change the highlighted numbers.

   **Note:** Times are in 24 hour format.

3. To move from one field to the other, repeat pressing the ◄ or ► button until the highlight moves from one field to the other.

   To save these settings, press the Back button.
Settings

To raise or lower an outbound volume level that is active during selected days and times, use the + and − buttons for **Outbound volume**.

**Note**: This **Outbound volume** level will only be active during scheduled days and times, and only if it is enabled. To enable this **Outbound volume** level during scheduled times, select **Enable** to highlight the ✔.

Schedule

1. To select days when these outbound volume settings can be enabled, on the SCHEDULED OUTBOUND VOLUME SETTINGS display, select **Schedule**.

   On the SCHEDULE OUTBOUND VOLUME display, select the day you want to schedule the outbound volume setting.

2. On the SELECT SCHEDULE TIMES display, select the time period you want to apply to this day by pressing the ▲ (up) and ▼ (down) buttons to scroll through the 7 available time periods.

   When the desired time period is highlighted, press the **Edit button**.

3. On the EDIT display, press the **Scheduled button** to highlight ✔ (on) or − (off) for the selected time period.

   If you want the outbound volume setting to be on or off during this time period every day, press the **Apply to all days? button** to highlight Yes.

   If No is highlighted, only the selected day will be affected by this change.

   If you need help, press the **Help button**. To save these settings, press the **Back button**.
4. Confirmation of the current activation and level is displayed on the IN/OUTBOUND VOLUME display.

2. Ceiling Speaker Volume

To raise and lower the volume levels heard from the ceiling speaker, select Ceiling speaker from the VOLUME MENU and then on the IN/OUTBOUND VOLUME display, select which volume you would like to adjust and use the + and − buttons.

If a volume is set to 0, that function turns off.

To save these settings, press the Back button.

3. Line In/Out

To raise or lower the volume level to or from any device connected to the base station line output, select Line In or Line Out on the LINE IN/OUT VOLUME display and then use the + and − buttons.

To save these settings, press the Back button.

4. Vehicle Tone in Headset

The VEHICLE TONE VOLUME setting only adjusts the level of alert tones heard in the headsets.

To raise and lower the volume level of alert tones, use the + and − buttons.

To save these settings, press the Back button.
5.7.5 Register Headsets

Each headset must be “registered” to the base station, so the base station will recognize it when its power is on, and will be able to tell the difference between it and other electronic equipment operating on similar frequencies. If a headset is replaced, you must register the new one before you use it.

To register headsets to the base station, see Section 4.2.5, pg. 16.

5.7.6 HME Sales and Service

To contact HME Technical Support, note the phone number listed next to “For Service:” on the LANE STATUS display. Or email support@hme.com.

5.7.7 Stores Settings

Store settings are crucial to drive-thru operation. After you setup the initial settings, they can be changed by store managers or other authorized personnel.

After you have configured all store settings, set up a password to control access to store settings, and then provide it to the store manager.

1. Press the More button from the MAIN MENU display to access the STORE SETTINGS display.

2. Press the Store settings button on the ADVANCED MENU.
**Set Date or Time**

1. To set the date or time, press the **Set date** or **Set time button** on the STORE SETTINGS display.

**Note**: All times are in 24-hour format.

2. On the SET DATE or SET TIME display, use the ◄ and ► buttons to move the highlighted box to the left and right in the **Date** or **Time** field, and use the + and − buttons to enter the desired number in the highlighted box.

Press the **Back button** on either screen to save settings and return to the STORE SETTINGS display.

**A HINT for setting the time accurately**:
Set the time about a minute or so in advance of the known correct time. When the correct time matches that setting, press the **Back button**.
Set Store Hours

1. To set the store hours for any or every day, press the **Set store hours button** on the STORE SETTINGS display.

2. On the STORE HOURS display, press the button next to the day you would like to change.

   On the SET STORE HOURS display, use the ◄ and ► buttons to move the highlight in the Open or Close field, and use the + and − buttons to change the highlighted numbers.

   To move from one field to the other, repeat pressing the ◄ or ► button until the highlight moves to the other field.

   **Note**: If your store is open 24 hours, set the Open time the same as the Close time.

3. If you want these store hours to apply to every day, press the **Copy button** and then press the **Apply to all days? button** to highlight Yes.

   If No is highlighted, these store hours will apply only to the selected day.

   To save these settings, press the **Back button**.
Edit Schedule Times

Up to 12 Schedule Times can be set to establish periods in which messages can be played from the Message Center. Schedule Times can be edited as needed.

1. To make changes to the **Schedule Times**, press the **Edit schedule times button** on the STORE SETTINGS display.

   The EDIT SCHEDULE TIMES display can also be accessed through the MESSAGE CENTER.

2. On the EDIT SCHEDULE TIMES display, press the ▲(up) and ▼(down) **buttons** to move up and down the list of time periods.

   You can continue pressing the ▼ button past 7 until you reach 12. When the time period you would like to change is highlighted, press the **Edit button**.

   **Note:** Changing these time periods will affect all Message Center message schedules. Time periods for **Scheduled Outbound Volume Settings** will not be affected.

3. Use the ◄ and ► **buttons** to move the highlight in the **Start** or **Stop** field, and then use the + and − **buttons** to change the highlighted numbers.

   To move from one field to the other, repeat pressing the ◄ or ► **button** until the highlight moves beyond the end of one field and into the other.

   If your store is open 24 hours, and you want a schedule to run for 24 hours, set the **Stop** time the same as the **Start** time. To save these settings, press the **Back button**.
Set Password

1. When you have completed all the other Store Settings, set up a user password. When the installation is finished, be sure to give the password to the store manager.

   To set a password for the first time, press the Set password button on the STORE SETTINGS display.

2. Use the ◄ and ► buttons to move the highlighted box in the Enter new password field.

   Use the + button to put alphabetic characters in the highlighted box, or the − button to put numeric characters in the highlighted box.

   Continuing down from A will take you to numeric characters. Continuing up from 9 will take you to alphabetic characters.

   Press the ► button to move the highlighted box to the next position and enter the next character. If you want to start over with a new password, press the Clear All button.

   After entering the entire new password, press the Back button twice to save the new password and return to the ADVANCED MENU.

B-to-Order Taker

Press the B-to-Order Taker button on the STORE SETTINGS display to select ✔ (on) to allow the Order Taker to hear B button communication while pressing an A button. If you select − (off), the Order Taker will not hear B button communication while pressing an A button.

To save this setting, press the Back button.
VAA Settings
VAA (Variable Audio Attenuation) settings can be adjusted to eliminate echo, feedback or fluctuating inbound audio levels.

1. To turn the VAA feature on/off, or to adjust VAA levels, press the More button on the STORE SETTINGS display.

2. On the ADVANCED STORE SETTINGS display, press the VAA button and then press the VAA button to select ✔ (on) or − (off).

3. To adjust VAA sensitivity or VAA attenuation, select the corresponding button and then press the + and − buttons.

Notes:
In multiple-lane configurations, VAA settings will appear for Lanes 1 and 2. Settings will be similar for both lanes.
If you have a dual lane drive-thru operation, you may need to make this adjustment for each lane.
See below for details on VAA.

VAA Sensitivity Level
This is the volume level of the order taker’s voice required to activate the VAA circuit. During normal operation, the inbound audio level should be reduced when the Order Taker speaks to the customer, and should recover when the Order Taker stops speaking. If speaking to the customer does not automatically reduce the inbound level, press the VAA sensitivity button and then press the + and − buttons to adjust sensitivity to the Order Taker’s voice.

VAA Attenuation Level
This is the amount that the inbound volume level is reduced when the Order Taker speaks to the customer. The attenuation level is factory set at 15dB, and should not require adjustment.
If the Order Taker cannot hear the inbound audio at all while speaking, the VAA attenuation can be adjusted to a lower level. To make this adjustment, press the VAA attenuation button and then press the + and − buttons until the desired level is reached. If you do not want any attenuation, please just turn off VAA without adjusting this setting.
See Section 6.1, pg. 86, for more information on VAA.
**Restore Installer Settings**

After the initial installer settings have been made, store personnel can customize adjustments to settings. After doing so, they can always return the base station to its original installer settings.

1. Press the **Restore installer settings button** on the ADVANCED STORE SETTINGS display.

2. Press the **Restore button** on the RESTORE INSTALLER SETTINGS display.

**AVC Setting**

Press the **AVC button** to select ✓ (on) or − (off) for AVC (Automatic Volume Control). When there is excessive outside noise, the volume level of the order taker’s voice will increase. When it is quiet in the drive-thru area, the volume level will be decreased.

**Note:** In multiple-lane configurations, **AVC** settings will appear for Lanes 1 and 2. Settings will be similar for both lanes.

See [Section 6.3](#), pg. 86, for more information on **AVC**.
Phone Headset

1. Press the **Phone headset button** on the ADVANCED STORE SETTINGS display.

2. On the SELECT PHONE HEADSET display, use the ◀ and ► buttons to move the highlight in the Select phone headset field, and then use the + and − buttons to enter number of the headset.

   Press the **Back button** to save the settings.

LCD Contrast

1. Press the **LCD Contrast button** on the ADVANCED STORE SETTINGS display to adjust the light/dark contrast of the base station display.

2. Press the + (lighter) and − (darker) buttons to adjust the contrast.

   **Note:** This is a factory setting that does not normally require adjusting during installation.

   Press the **Back button** to save the settings.
5.7.8 Installer Setup
See Section 5.2, pg. 27, for Basic Installer Setups and Section 5.3, pg. 33, for Advanced Installer Setups.

5.7.9 Network
See Section 5.5, pg. 41, for Network settings.

5.7.10 Diagnostics
The Diagnostics button is available if you experience a problem with EOS|HD operation and you need to call HME Technical Support. The Technical Support representative will guide you through the automated diagnostics.

1. Select Menu on the base station LANE STATUS display and then press the More button on the MAIN MENU.

2. On the ADVANCED STORE SETTINGS display, press the VAA button and then press the VAA button to select ✔ (on) or − (off).

3. If requested, press the More button on the DIAGNOSTICS display for additional diagnostics.
5.7.11 Early Warning Setting

An external vehicle detector can be used with the EOS|HD to give a pre-warning signal when a vehicle enters the drive-thru area. To set up a pre-warning signal, first install the external vehicle detector at the desired detection point then connect its cable to the base station audio circuit board according to the appropriate wiring diagram listed in Section 14, pg. 102.

5.8 PC Navigation

If your EOS|HD was set up to operate on a network, you can access base station settings using a web browser. Refer to Section 5.5, pg. 41, to configure the base with the proper Network settings according to information from your IT department.

To open the EOS|HD on your PC, enter its IP Address in the address bar on your internet browser as shown below, and then press the Enter key on your keyboard.

![Image of web browser with IP Address]

**Note:** You can find the IP Address on the base station Network Status display by using the following button sequence:

LANE STATUS > More > More > More > More

From the **Main Menu**, select a category to view or edit.

Some topics have a **Secondary Menu** bar from which you can select a sub-topic.

![Image of main and secondary menu]

If you click your cursor on an **Edit button**, an edit bar will appear with setup options. If you make any setup changes, you must click on the **Save button** to save your changes.
The EOS|HD interface provides the following web pages:

- **Status** – provides Lane, Message, Base, Version, Network and Copyright information.
- **Vehicle detection** – allows you to control and reset the vehicle detectors on the base.
- **Volume adjust** – allows you to adjust audio volumes.
- **Register headset** – allows you to register one or multiple headsets, or to clear headset registrations.
- **Message Center** – allows you to set up messages to be played to audio destinations and Alert messages sent to email recipients.
- **Store settings** – allows you to set up store parameters such as date, time, store hours, schedule times, passwords, B to Order Taker, VAA, AVC, Phone headset and LCD contrast, as well as Restore installer settings.
- **Installer settings** – allows you to set up basic operational settings such as Lane configuration, Auto-Hands-Free, Language selection, Speaker post configuration, ClearSound, Phone, Line In/Out routing, Radio options and Vehicle tone, as well as Save installer settings and Restore factory settings.
- **Reports** – allows you to view Message Center settings and headset statistics reports.
- **Diagnostics** – provides information that may be used by HME Technical Support to diagnose problems.
- **Service** – displays all version information and contact information, in case you need assistance from HME Technical Support.
6. **AUDIO PROCESSING FUNCTIONS**

The EOS/HD Base Station has several advanced audio processing features designed to improve the quality of communication with the customer at the menu. Below are brief explanations of how each feature works:

6.1 **VAA (Variable Audio Attenuation)**

**Variable Audio Attenuation** (VAA) is designed to reduce the volume of the customer's voice or other loud noises in your headset. If a customer is speaking loudly, speaking while you’re speaking or other loud noises occur, it may become confusing. The VAA option assures that as you speak, the sound from outside is reduced. See Section 5.7.7 - VAA Settings, pg. 80.

6.2 **ANC (Automatic Noise Cancellation)**

**Automatic Noise Cancellation** (ANC) is designed to reduce the level of outside sounds when the customer is not speaking.

For example, a customer starts to place an order and then pauses to think. Within a moment, the volume level from outside drops and becomes quiet. Birds, cars driving by, engine noise and other non-customer sounds are reduced. When the customer begins speaking, the volume returns to a normal level. This feature is beneficial for reducing order taker listening fatigue and improving the overall order process. See Section 5.2.5, pg. 31.

6.3 **AVC (Automatic Volume Control)**

**Automatic Volume Control** (AVC) automatically reduces the volume level coming from the outside speaker during quiet times, such as in the early morning or late at night. AVC monitors the ambient sound level outside and adjusts speaker’s volume level. If the ambient outside sound level increases, AVC stops adjusting and returns volume to its original level. Section 5.7.7 - AVC Settings, pg. 81.

6.4 **Echo Cancel**

In situations where microphones and speakers are in close proximity to one another, sound from the Speaker can sometimes be picked up by the microphone, creating a loop that causes feedback in the headset. **Echo Cancel** recognizes the sound from the Speaker and prevents it from looping through the Microphone. See Section 5.2.5, pg. 31.

6.5 **Inbound Noise Cancel**

**Inbound Noise Cancel** greatly enhances the Order Taker experience by virtually eliminating all unwanted outside noise (such as a car engine) that may normally be picked up by a microphone. Inbound Noise Cancel distinguishes human voice from ambient noise and filters the audio, making the customer’s voice much more clear. Other outside sounds such as planes flying over, sprinklers or street noise are also filtered. See Section 5.2.5, pg. 31.

6.6 **Outbound Noise Cancel**

**Outbound Noise Cancel** virtually eliminates all in-store noise from being heard through the outside speaker. A quick service restaurant can produce sounds caused by machines necessary for the operation of the store. These sounds can sometimes be picked up by the headset’s microphone and potentially heard by the customer. **Outbound Noise Cancel** distinguishes human voice from in-store noise, filtering the audio so that only the Order Taker’s voice is heard loud and clear by the customer.
## 7. SYSTEM FUNCTIONAL CHECK

<table>
<thead>
<tr>
<th>ACTION</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plug base station power adapter into electrical outlet.</td>
<td>System power is on. Base station lights are on.</td>
</tr>
<tr>
<td><strong>Go outside (or have someone else go) to the speaker/microphone and do the following.</strong></td>
<td></td>
</tr>
<tr>
<td>Push button <strong>A1</strong> or <strong>A2</strong> and speak into headset microphone.</td>
<td>Audio should be heard at outside speaker.</td>
</tr>
<tr>
<td>Release button <strong>A1/A2</strong>. On the base station MAIN MENU display, press the <strong>Vehicle Detection button</strong>, and then press the <strong>Mode button</strong> to select OVERRIDE. Tap on outside microphone.</td>
<td>Vehicle present tone should be heard in headset earpiece, followed by inbound audio. If this does not happen, there is a wiring problem.</td>
</tr>
</tbody>
</table>
8. SYSTEM FUNCTIONAL CHECK

The EOS|HD can be operated in **Hands-Free** (HF), **Auto-Hands-Free** (AHF), **B-channel Hands-Free** (BHF) or **Push-To-Talk** (PTT) modes.

A **Full-duplex** system supports HF, AHF, BHF and PTT operation. In HF, AHF and BHF operation, communication can be transmitted and received at the same time, as in a normal telephone conversation.

**In the AHF mode**, transmission and reception are activated automatically when a customer drives into the drive-thru lane.

**In the HF mode**, transmission and reception are activated by touching and releasing the **A1** or **A2 button** on the headset.

In the PTT mode, the **A1** or **A2 button** must be pressed and held while the operator is talking to the customer. A **Half-duplex** system should only use the PTT mode, and the customer’s voice will not be heard while the operator is pressing the **A1** or **A2 button**.

In single lane operations, when a customer arrives in the drive-thru lane, you will hear a single beep in the headset.

In dual-lane operations, when a customer arrives in a drive-thru lane, you will hear one beep in the headset for Lane 1 and two beeps for Lane 2.

In dual-lane operation, if you are communicating with a customer in one lane when another customer arrives in the other lane, you will hear one beep in the headset for Lane 1 and two beeps for Lane 2. When the customer leaves the speaker post in the lane you are connected to, the same beep will repeat in the headset every four seconds until you touch the **A1** or **A2 button** to communicate with the customer in the other lane.

**Note**: In dual-lane operations, if you have a Mode Switch and it is set to “DEDICATED,” you will only hear beeps in the headset when a customer arrives in the lane you are operating. See **Section 1.1**, pg. 1, for more information regarding **Full Duplex** and **Half Duplex**.

8.1 Changing Headset Languages

To change the language of the cues heard in the headset, from English to Spanish/French and back to English, with the headset power off, press and hold the volume-down **V button** and the **A1 button** while you press the **Power button**. The language of the cues heard in the headset will change when the power goes on. The headset will remember this setting.

8.2 Obtaining Headset Status

To obtain headset status, with its power off, press and hold the volume-down **V button** and the **A2 button** while you press the power button. You will hear the status message in the headset earpiece when the power goes on.
8.3 Headset Communication Modes (Single and Dual-lane operation)

**Hands-Free (HF) Mode:**
By default, this setting is ON for the A1 (for Lane 1) and A2 button (for Lane 2). Press the A1 or A2 button once to talk to a customer at the menu. Communication automatically disconnects when the customer drives away, or press the A1 or A2 button to manually disconnect.

- **Turn Mode ON:** With the headset power OFF, simultaneously press and hold the B button and the Up arrow (Λ), and then press the Power button. Once the power is on, release B and (Λ).
- **Turn Mode OFF:** With the headset power OFF, simultaneously press and hold the B button and the Down arrow (V) while you press the Power button. Once the power is on, release B and (V).

A voice prompt in the headset will say “Headset #, Battery Full/Half/Low, A Hands Free On/Off, Lane #”.

- Headset alert tone(s) signals arrival at the speaker post or menu board (single beep for Lane 1, double beep for Lane 2).
- Use the A and down V buttons to adjust volume.
- Touch and release A1 or A2 to initiate or end communication.
- To change lanes (Dual-Lane operation), touch and release the corresponding A button.

**Auto-Hands-Free (AHF) Mode:**
By default, this setting is OFF. Auto Hands Free mode provides automatic headset connection between the Order Taker and the customer when the vehicle arrives at the menu. The headset will automatically disconnect when the customer drives away.

Only two headsets may be configured in Auto Hands Free mode (one headset exclusively for Lane 1 and the other for Lane 2).

*Note:* The AHF option must be enabled in the base Installer Setup before a headset can be configured. Once enabled, the base will automatically reset to initialize the setting and the first headset can be enabled in AHF. Auto Hands Free mode will not be saved when the headset is powered off.

- **Turn Mode ON:** With the headset powered off, press and hold the A1 button (for Lane 1) or A2 button (for Lane 2) and the Up arrow (Λ) and then press the Power button. Once the power is on, release A1 or A2 and (Λ).
- **Turn Mode OFF:** Simply turn the headset power OFF then back ON.

A voice prompt in the headset will say “Headset #, Battery Full/Half/Low, Auto Hands Free, Lane # On/Off, Lane #”.

- Headset alert tone(s) signals arrival at the speaker post or menu board (single beep for Lane 1, double beep for Lane 2).
- Use the A and down V buttons to adjust volume.
- Speak and listen to the customer without pressing any buttons.
- Touch and release A1 or A2 to initiate or end communication.
**B-Channel Hands-Free (BHF) Mode:**

By default, this setting is **OFF** for **B button**. Press the **B button** once to communicate with other headsets, remaining hands-free to perform other tasks. Press the **B button** to disconnect.

- **Turn Mode ON**: With the headset power OFF, simultaneously press and hold the **B button** and A2 and then press the **Power button**. Once the power is on, release **B** and **A2**.

- **Turn Mode OFF**: With the headset power OFF, press and hold the **B button** and **A2** and then press the **Power button**. Once the power is on, release **B** and **A2**.

A voice prompt in the headset will say “Headset #, Battery Full/Half/Low, B Hands Free On/Off, Lane #”.

See Section 8.5, pg. 92, for more information on BHF mode.

**Push-To-Talk (PTT) Mode:**

By default, this setting is **OFF**. Press and hold the **A button** to connect and speak to a customer. Release the **A button** to disconnect from the customer.

- **Turn mode ON**: With the headset power OFF, simultaneously press and hold the **B button** and the **Down** arrow (**V**) and then press the **Power button**. Once the power is on, release **B** and (**V**).

- **Turn mode OFF**: With the headset power OFF, simultaneously press and hold the **B button** and the **Up** arrow (**Λ**) while you press the **Power button**. Once the power is on, release **B** and (**Λ**).

A voice prompt in the headset will say “Headset #, Battery Full/Half/Low, A Hands Free On/Off, Lane #”.

- Headset alert tone(s) signals arrival at the speaker post or menu board (single beep for Lane 1, double beep for Lane 2).

- Use the **Lambda** and down **V** buttons to adjust volume.

- Touch and hold the **A1 button** (Lane 1) or **A2 button** (Lane 2) to speak to a customer. Release to stop speaking to the customer (full duplex) or to listen to the customer (half duplex).

See Section 1.1, pg. 1, for more details on Duplex Modes.
8.4 Tandem Operation (two speaker posts in one lane)

In Tandem operation, customers at Order Point #1 are served by Order Taker #1, and customers at Order Point #2 are served by Order Taker #2.

If a customer arrives at Order Point #2 when there is no customer at Order Point #1, a “Please pull forward” message will automatically be played from the Speaker Post or Menu Board #2.

When a customer arrives at Order Point #1, Order Taker #1 will be alerted.

If a customer arrives at Order Point #2 when there is already a customer at Order Point #1, Order Taker #2 will be alerted.

**Note:** If you want to change the pre-recorded “Please pull forward” message, see Section 5.6.3, pg. 51.

**CAUTION:** In tandem operation, if Order Taker #2’s headset is set in the Auto Hands-Free mode, the “Please pull forward” message will not be played at Order Point #2. If necessary, Order Taker #2 will have to ask the customer at Order Point #2 to pull forward.
8.5 Internal Communication

If you’re using the BHF mode, the B channel remains open for hands-free communication among crew members. If a customer arrives, B-channel communication will automatically be interrupted to allow communication with the customer. See Section 8.3, pg. 89, for more information on BHF mode.

If you’re NOT using the BHF mode, press and hold the B button to communicate internally with other headset operators, then release.

In single-lane operations, up to four operators can have conference-call type communication by pressing and holding their B button. They will hear each other without interference.

In dual-lane operation, if the system was set up for “Split-B”, internal communication will be heard only by headset operators in their lane.

If the system was NOT set up for Split-B operation, all internal communication will be heard by operators in both lanes. See Section 5.4.1, pg. 39, for more information on Split B settings.

In dual-lane operation, up to three operators can have conference-call type communication by all pressing and holding their B buttons. They will hear each other without interference.

If a car arrives in a lane while internal communication is taking place, priority will be given to the respective A channel for customer communication. This reduces the number of internal communication channels available.

8.6 Wired Backup System

In order to use a wired backup system, there must be a Switcher Board (optional) in the base station. Open the base station, and look for the board shown in Figure 26. If there is no Switcher Board, a wired backup system cannot be used. If there is a Switcher Board, place the S2 switch in the IN position to use the wired backup system. When using the EOS|HD, leave the S2 switch in the OUT position.

![Figure 26. S2 switch on Switcher Board](image)
## 9. TROUBLESHOOTING

<table>
<thead>
<tr>
<th>Problem</th>
<th>Probable Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Battery failed” is heard in headset when power button is pressed.</td>
<td>Battery may be defective.</td>
<td>Replace battery. Call HME.*</td>
</tr>
<tr>
<td></td>
<td>Battery contacts may be dirty.</td>
<td>Clean battery contacts with alcohol.</td>
</tr>
<tr>
<td>“Headset failed” is heard in headset when power button is pressed.</td>
<td>Headset may be defective.</td>
<td>Use another headset. Call HME.*</td>
</tr>
<tr>
<td></td>
<td>Battery contacts may be dirty.</td>
<td>Clean headset battery contacts with alcohol.</td>
</tr>
<tr>
<td>You hear your echo in headset earpiece when you speak into microphone.</td>
<td>Outside speaker and microphone may not be properly installed.</td>
<td>Be sure speaker and microphone are isolated from each other, and are tightly mounted with enough foam packed around each of them to absorb vibrations.</td>
</tr>
<tr>
<td></td>
<td>Outbound and/or inbound audio level may be set too high.</td>
<td>Set outbound audio level just high enough to be heard by customers. Lower inbound audio to comfortable level.</td>
</tr>
<tr>
<td></td>
<td>VAA controls may need to be adjusted.</td>
<td>Adjust VAA Level control to reduce inbound audio level when you are speaking into the headset microphone. Adjust VAA attenuation level to reduce inbound audio level when you are speaking into the headset microphone. <strong>NOTE:</strong> If the inbound level is too low, you will not hear the customer.</td>
</tr>
<tr>
<td>You hear your echo in headset earpiece when you speak into microphone.</td>
<td>Power may be off at base station.</td>
<td>Be sure HME logo and other lights on base station are lit. Check circuit breaker for building.</td>
</tr>
<tr>
<td></td>
<td>Power supply in base station may not be working.</td>
<td>Be certain power adapter is plugged into AC electrical outlet, and is connected to J3 on base station audio circuit board.</td>
</tr>
<tr>
<td></td>
<td>Headset power may not be on.</td>
<td>Press power button on headset. Be certain power light goes on and switches from red to green. Adjust volume with Volume-up and down buttons. Check headset power light. If not lit, replace battery. Use another headset. Call HME.* Register headset.</td>
</tr>
<tr>
<td>No sound is heard in headset when you press button A and speak into microphone.</td>
<td>Volume may not be set correctly.</td>
<td>Adjust volume with Volume-up and down buttons.</td>
</tr>
<tr>
<td></td>
<td>Battery may be low or defective.</td>
<td>Check headset power light. If not lit, replace battery. Use another headset. Call HME.*</td>
</tr>
<tr>
<td></td>
<td>Headset may be defective.</td>
<td>Use another headset. Call HME.*</td>
</tr>
<tr>
<td></td>
<td>Headset may not be registered.</td>
<td>Register headset.</td>
</tr>
<tr>
<td>Channel A or B is not working.</td>
<td>Headset power may not be on.</td>
<td>Press power button on headset. Be certain power light goes on and switches from red to green. Check power light. If not lit, replace battery. Use another headset. Call HME.* Register headset.</td>
</tr>
<tr>
<td></td>
<td>Battery may be low or defective.</td>
<td>Check power light. If not lit, replace battery. Use another headset. Call HME.*</td>
</tr>
<tr>
<td></td>
<td>A1/A2 or B1/B2 light on base station does not light when button A or B is pressed.</td>
<td>Use another headset. Call HME.*</td>
</tr>
<tr>
<td></td>
<td>Headset may not be registered.</td>
<td>Register headset.</td>
</tr>
<tr>
<td>Outbound sound is too low.</td>
<td>Outbound volume may be set too low for environment.</td>
<td>Adjust outside speaker volume level.</td>
</tr>
<tr>
<td>No outbound sound; Customer cannot hear anything.</td>
<td>System may be set for speed team.</td>
<td>Check speed-team setting.</td>
</tr>
<tr>
<td></td>
<td>There may be loose wires on outside speaker or base station circuit board.</td>
<td>Check vehicle present light (car) on base station. Check outside speaker wire connections on J6 or J14 in base station and at outside speaker.</td>
</tr>
<tr>
<td></td>
<td>Defective speaker or base station.</td>
<td>Call HME.*</td>
</tr>
<tr>
<td>Customer cannot be heard in push-to-talk (PTT) operation.</td>
<td>System may be set for speed team.</td>
<td>Check speed-team setting.</td>
</tr>
<tr>
<td></td>
<td>Base station may be set for wrong drive-thru mode (full or half-duplex). See Section 1.1.</td>
<td>Check drive-thru mode setting.</td>
</tr>
<tr>
<td>PROBLEM</td>
<td>PROBABLE CAUSE</td>
<td>SOLUTION</td>
</tr>
<tr>
<td>---------</td>
<td>----------------</td>
<td>----------</td>
</tr>
<tr>
<td>You’re hearing clicks and/or pops</td>
<td>The cause could be Radio Frequency Interference caused by a nearby Wi-Fi router or Wi-Fi access point.</td>
<td>See Hop Band: Radio Frequency Interference, Section 3.3. For further assistance, call HME.*</td>
</tr>
<tr>
<td>Voice breakup while talking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Busy” prompt in headset when a button is pressed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Headset flashing red lights</td>
<td></td>
<td></td>
</tr>
<tr>
<td>You’re intermittently hearing “Lane 1” in headset</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Only intermittent voice can be heard in headsets.</td>
<td>Transmitter antenna connectors on base station transceiver circuit board may be loose or damaged.</td>
<td>Be certain antennas are screwed securely onto base station. Check transmitter antenna cable connections at ANT1 and ANT2 on left side of transceiver circuit board. Call HME.*</td>
</tr>
<tr>
<td>Personnel hear customers in ceiling speaker or headsets, but cannot hear each other.</td>
<td>Circuit board may be defective.</td>
<td>Call HME.*</td>
</tr>
<tr>
<td>VAA level is too sensitive.</td>
<td></td>
<td>Reduce VAA level.</td>
</tr>
<tr>
<td>Personnel hear customers in ceiling speaker or headsets, but cannot hear each other.</td>
<td>Circuit board may be defective.</td>
<td>Call HME.*</td>
</tr>
<tr>
<td>VAA level is too sensitive.</td>
<td></td>
<td>Reduce VAA level.</td>
</tr>
<tr>
<td>No tone or sound is heard in ceiling speaker or headsets when vehicle enters drive-thru lane.</td>
<td>Power interruption may have caused vehicle detection circuit to be out of balance.</td>
<td>When no vehicle is in the drive-thru lane, reset vehicle detector.</td>
</tr>
<tr>
<td>System may be set for speed team.</td>
<td>Be certain speed-team setting is not set to ON.</td>
<td></td>
</tr>
<tr>
<td>Connector may be loose.</td>
<td>Check all connectors in base station. Call HME.*</td>
<td></td>
</tr>
<tr>
<td>Personnel cannot hear customers in ceiling speaker or headsets</td>
<td>There may be loose wires on base station circuit board.</td>
<td>Check all connections on base station circuit boards.</td>
</tr>
<tr>
<td>System may be set for speed team.</td>
<td>Be certain speed-team setting is not set to ON.</td>
<td></td>
</tr>
<tr>
<td>Outside speaker, audio circuit board or vehicle detector board failed.</td>
<td></td>
<td>Call HME.*</td>
</tr>
<tr>
<td>VAA attenuation set too high</td>
<td>Reduce attenuation.</td>
<td></td>
</tr>
<tr>
<td>Headset has intermittent sound.</td>
<td>Battery may be low.</td>
<td>Replace battery.</td>
</tr>
<tr>
<td>Headset may be defective.</td>
<td>Use another headset. Call HME.*</td>
<td></td>
</tr>
<tr>
<td>There is still sound in headset after all customers have been served.</td>
<td>Base station may be set to override position.</td>
<td>On the VEHICLE DETECTION menu, be certain the Mode setting is in the Normal position.</td>
</tr>
<tr>
<td>Vehicle detector may be locked up.</td>
<td></td>
<td>On the VEHICLE DETECTION menu, select Reset Veh Detect.</td>
</tr>
<tr>
<td>Battery charger is not working.</td>
<td>Charger may not be plugged in.</td>
<td>Be certain charger is plugged in. If it still is not working, call HME.*</td>
</tr>
<tr>
<td>“Registration failed” message heard in headset. Lights stay red.</td>
<td>Base station power not on.</td>
<td>Be sure HME logo and other lights on base station are lit. If no light is lit, be certain power adapter is plugged into electrical outlet, and is connected to J3 on base station audio circuit board.</td>
</tr>
<tr>
<td>Registration button not pushed.</td>
<td>Repeat registration procedure. Call HME.*</td>
<td></td>
</tr>
</tbody>
</table>

* For assistance, call HME at 1-800-848-4468, or email support@hme.com.
Figure 27. Base station internal connectors and controls

1. ANT1 antenna connector
2. ANT2 antenna connector
3. Switcher board connectors, J4-Lane 1
4. Switcher board connectors, J13-Lane 2
5. Ethernet connector, J12
6. Power connector, J3
7. Ceiling speaker connector, J1-Lane 1, J11-Lane 2
8. Outside speaker/microphone connector, J6-Lane 1, J14-Lane 2
9. Line in/out connector, J7-Lane 1, J16-Lane 2
10. Early warning/alert connector, J9-Lane 1, J19-Lane 2
11. Remote switch connector, J2
12. Reset switch
13. Telephone connector, J15
14. Doors connector for Alert message activation, J5
15. Vehicle detector board (VDB) connector, J10-Lane 1, J20-Lane 2
10. SET THE BASE STATION LANGUAGE

The Base station factory default setting is **English**. To change the language:

1. Select **Menu** on the base station LANE STATUS display and then press the **More button** on the MAIN MENU.

2. On the ADVANCED MENU, press the **Installer Setup button**.

3. On the ENTER INSTALLER PASSWORD display, enter the 4-digit password in the highlighted box in the Enter Password field.

   See **Section 5.2**, pg. 27, for instructions for entering a password.

   Press the **Continue button** to access the INSTALLER SETUP display.
4. Press the **More button** on the INSTALLER SETUP display, and then select Language on the ADVANCED INSTALLER SETUP display.

On the SELECT LANGUAGE display, press the **Select language button** to highlight the desired language.

After selecting the language, press the **Back button** to save the setting. The base station will automatically be reset to its previous operating mode.
## 11. EQUIPMENT SPECIFICATIONS

### Base Station
- **Voltage input**: 24VDC ±2.5V
- **DC current input**: 2.5A maximum
- **Audio distortion**: 5% maximum level
- **Outside speaker output**: 3 watts RMS into 8 ohms
- **Ceiling speaker power**: 3 watts RMS into 8 ohms
- **TX/RX frequency**: 2400MHz – 2483.5MHz
- **Dimensions**: 9.75”H x 13” W x 3.5” D
  - (248 mm x 330 mm x 89 mm)
- **Weight**: 3.25 lbs (1.47 kg) maximum

### Headset
- **Battery type**: 3.6V Lithium ion
- **Battery life**: 11 - 13 hours (typical)
- **RF frequency**: 2400MHz – 2483.5MHz
- **Weight**: 3.53 oz (100 gm) with battery

### Battery Charger
- **Voltage input**: 16.5V AC
- **Charging time**: 2.5 hrs maximum
- **Dimensions**: 5.56” x 4.25” x 1.69”
  - (141mm x 108mm x 43mm)
- **Weight**: 12.03 oz (341 gm) with bracket
Figure 28. Typical EOS | HD Base Station block diagram
13. BASE INTERFACE DESCRIPTION

13.1 Audio Circuit Board

**J1 – Ceiling Speaker In/Out, Lane 1**
- J1,1 Ground
- J1,2 /A1 Talk
- J1,3 Relay 1 Common
- J1,4 Relay 1 Normally Open
- J1,5 Relay 1 Normally Closed
- J1,6 Ceiling speaker +
- J1,7 Ceiling speaker –
- J1,8 Ground

**J2 – Remote**
- J2,1 Ground
- J2,2 /Remote speed team
- J2,3 Ground
- J2,4 /Operator
- J2,5 Not used

**J3 – Power**
- J3,1 +24VDC / 16VAC power input
- J3,2 –24VDC / 16VAC power input
- J3,3 Ground (For DC only)

**J4 – Interface w/ Switcher Board, Lane 1**
- J4,1 Microphone 1
- J4,2 Microphone 2
- J4,3 Ground
- J4,4 +12VDC
- J4,5 Not used
- J4,6 Negative vehicle detect input
- J4,7 Vehicle detector power (12V)
- J4,8 Not used
- J4,9 Outside speaker –
- J4,10 Outside speaker +

**J5 – Door Inputs**
- J5,1 Door 1
- J5,2 Door 2
- J5,3 Door 3
- J5,4 Door 4
- J5,5 Ground

**J6 – Interface w/o Switcher Board, Lane 1**
- J6,1 Microphone 1
- J6,2 Microphone 2
- J6,3 Ground
- J6,4 +12VDC
- J6,5 Negative vehicle detect input
- J6,6 Not used
- J6,7 Outside speaker –
- J6,8 Outside speaker +

**J7 – Line In/Out, Lane 1**
- J7,1 Line out
- J7,2 Ground
- J7,3 Line in
- J7,4 Ground
- J7,5 Not used

**J9 – Early Warning / Alert, Lane 1**
- J9,1 Early warning
- J9,2 Ground
- J9,3 Not used
- J9,4 Ground
- J9,5 Alert in

**J10 – Vehicle Detector Board**

**Interface, Lane 1 (Primary)**
- J10,1 Negative vehicle detect signal
- J10,2 +12V Vehicle detector power
- J10,3 Ground
- J10,4 Not used
- J10,5 Not used

**J11 – Ceiling Speaker In/Out, Lane 2**
- J11,1 Ground
- J11,2 /A1 Talk
- J11,3 Relay 2 Common
- J11,4 Relay 2 Normally Open
- J11,5 Relay 2 Normally Closed
- J11,6 Ceiling speaker +
- J11,7 Ceiling speaker –
- J11,8 Ground

**J13 – Interface w/ Switcher Board, Lane 2**
- J13,1 Microphone 1
- J13,2 Microphone 2
- J13,3 Ground
- J13,4 +12VDC
- J13,5 Not used
- J13,6 Negative vehicle detect input
- J13,7 Vehicle detector power (12V)
- J13,8 Not used
- J13,9 Outside speaker –
- J13,10 Outside speaker +

**J14 – Interface w/o Switcher Board, Lane 2**
- J14,1 Microphone 1
- J14,2 Microphone 2
- J14,3 Ground
- J14,4 +12VDC
- J14,5 Negative vehicle detect input
- J14,6 Not used
- J14,7 Outside speaker –
- J14,8 Outside speaker +
### 13.2 Switcher Circuit Board

<table>
<thead>
<tr>
<th>J1 – DM5 Interconnect</th>
<th>J2 – Menu Board Interconnect</th>
<th>J3 – Detector/Timer Interconnect</th>
<th>J4 – Backup System Interconnect</th>
<th>J5 – Audio Board Interconnect</th>
<th>J6 – Vehicle Detector Board Interconnect</th>
<th>TB1 – Connector for Internal Detector</th>
</tr>
</thead>
<tbody>
<tr>
<td>J1,1 Microphone in</td>
<td>J2,1 Speaker/microphone in/out</td>
<td>J3,1 Loop</td>
<td>J4,1 Loop</td>
<td>J5,1 Microphone 1</td>
<td>J6,1 Vehicle detector signal</td>
<td>1 Loop in</td>
</tr>
<tr>
<td>J1,2 Microphone in</td>
<td>J2,2 Speaker/microphone in/out</td>
<td>J3,2 Loop</td>
<td>J4,2 Loop</td>
<td>J5,2 Microphone 2</td>
<td>J6,2 Vehicle detector power (12V)</td>
<td>2 Loop in</td>
</tr>
<tr>
<td>J1,3 Ground</td>
<td>J2,3 Shield</td>
<td>J3,3 Positive vehicle detection signal (in)</td>
<td>J4,3 Loop</td>
<td>J5,3 Ground</td>
<td>J6,3 Ground</td>
<td></td>
</tr>
<tr>
<td>J1,4 +12VDC</td>
<td>J2,4 Speaker out</td>
<td>J3,4 Ground</td>
<td>J4,4 Ground</td>
<td>J5,4 +12VDC</td>
<td>J6,4 Not used</td>
<td></td>
</tr>
<tr>
<td>J1,5 Not used</td>
<td>J2,5 Speaker out</td>
<td>J3,5 Negative vehicle detection signal (in)</td>
<td>J4,5 Not used</td>
<td>J5,5 Positive vehicle detector input (not used)</td>
<td>J6,5 Not used</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>J3,6 Greet</td>
<td>J4,6 Not used</td>
<td>J5,6 Negative vehicle detector input</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>J3,7 Greet</td>
<td>J4,7 Speaker/microphone in/out</td>
<td>J5,7 Vehicle detector power</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>J3,8 Negative vehicle detection signal (out)</td>
<td>J4,8 Speaker/microphone in/out</td>
<td>J5,8 Not used</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>J3,9 Ground</td>
<td>J4,9 +12V to +48V in</td>
<td>J5,9 Outside speaker –</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>J3,10 Positive vehicle detection signal (out)</td>
<td>J4,10 +12V to +48V in</td>
<td>J5,10 Outside speaker +</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 13.3 Vehicle Detector Circuit Board (Optional)

<table>
<thead>
<tr>
<th>P1 – Audio Board Interface Cable Connector</th>
<th>J19 – Early Warning / Alert, Lane 2</th>
<th>J20 – Vehicle Detector Board Interface, Lane 2 (Secondary)</th>
<th>TB1 – Vehicle Detector Loop Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1,1 Signal</td>
<td>J19,1 Early warning</td>
<td>J20,1 Negative vehicle detect signal</td>
<td>1 Loop in</td>
</tr>
<tr>
<td>P1,2 Power</td>
<td>J19,2 Ground</td>
<td>J20,2 +12V Vehicle detector power</td>
<td>2 Loop in</td>
</tr>
<tr>
<td>P1,3 Ground</td>
<td>J19,3 Not used</td>
<td>J20,3 Ground</td>
<td></td>
</tr>
<tr>
<td></td>
<td>J19,4 Ground</td>
<td>J20,4 Not used</td>
<td></td>
</tr>
<tr>
<td></td>
<td>J19,5 Alert in</td>
<td>J20,5 Not used</td>
<td></td>
</tr>
</tbody>
</table>
14. WIRING DIAGRAMS

Full-Duplex Drive-Thru System with VDB but no Switcher Board
- Page 103, Figure 29 — (Connections for Lane 1 or Single Lane)
- Page 104, Figure 30 — (Connections for Lane 2 of Dual/Y-Lane or Tandem)

Full-Duplex Drive-Thru System with VDB, Switcher Board and IC300 Intercom
- Page 105, Figure 31 — (Connections for Lane 1 or Single Lane)
- Page 106, Figure 32 — (Connections for Lane 2 of Dual/Y-Lane or Tandem)

Full-Duplex Drive-Thru System with VDB, Switcher Board and Microphone
- Page 107, Figure 33 — (Connections for Lane 1 or Single Lane)
- Page 108, Figure 34 — (Connections for Lane 2 of Dual/Y-Lane or Tandem)

Half-Duplex Drive-Thru System with VDB but no Switcher Board
- Page 109, Figure 35 — (Connections for Lane 1 or Single Lane)
- Page 110, Figure 36 — (Connections for Lane 2 of Dual/Y-Lane or Tandem)

Half-Duplex Drive-Thru System with VDB and Switcher Board
- Page 111, Figure 37 — (Connections for Lane 1 or Single Lane)
- Page 112, Figure 38 — (Connections for Lane 2 of Dual/Y-Lane or Tandem)

Page 113, Figure 39 — Optional Equipment Connections
This wiring diagram is for a Single-Lane drive-thru, or for Lane 1 of a Dual-Lane drive-thru. For Lane 2 of a Dual-Lane drive-thru, refer to the wiring diagram on the next page.
Figure 30. Full-Duplex Drive-Thru System with VDB but no Switcher Board (Lane 2 connections)
Figure 31. Full-Duplex Drive-Thru System with VDB, Switcher Board and IC300 (Lane 1 or Single Lane connections)
Figure 32. Full-Duplex Drive-Thru System with VDB, Switcher Board and IC300 (Lane 2 connections)

Diagram showing the wiring connections for a full-duplex drive-thru system, including the VDB lane 2 connections, switcher board, and IC300 intercom. The diagram includes labels for various components and connections, such as Microphone, VDB Lane 2, and underground loop. The text also mentions important notes for correct wiring and setup.
Figure 33. Full-Duplex Drive-Thru System with VDB, Switcher Board and Microphone (Lane 1 or Single Lane connections)
Figure 34. Full-Duplex Drive-Thru System with VDB, Switcher Board and Microphone (Lane 2 connections)
Figure 35. Half-Duplex Drive-Thru System with VDB but no Switcher Board (Lane 1 or Single Lane connections)
Figure 36. Half-Duplex Drive-Thru System with VDB but no Switcher Board (Lane 2 connections)
Figure 37. Half-Duplex Drive-Thru System with VDB and Switcher Board (Lane 1 or Single Lane connections)

This wiring diagram is for a Single-Lane drive-thru, or for Lane 1 of a Dual-Lane drive-thru.

For Lane 2 of a Dual-Lane drive-thru, refer to the wiring diagram on the next page.
This wiring diagram only shows Lane 2 connections for a Dual-Lane drive-thru.

For Lane 1 of a Dual-Lane drive-thru, or Single-Lane drive-thru connections, refer to the wiring diagram on the previous page.

Figure 38. Half-Duplex Drive-Thru System with VDB and Switcher Board (Lane 2 connections)
Figure 39. Optional Equipment

Remote Speed Team Switch, SW2

Remote Operator Switch, MS1000

Door 1 (switch closure to activate Alert Message 1)
Door 2 (switch closure to activate Alert Message 2)
Door 3 (switch closure to activate Alert Message 3)
Door 4 (switch closure to activate Alert Message 4)

NOTE: Arrows indicate signal direction.

Optional Equipment Wiring Diagram