

# **EOS**|**HD**<sup>®</sup>

# 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 <a href="http://www.hc-sc.gc.ca/ewh-sem/pubs/radiation/radio\_guide-lignes\_direct-eng.php">http://www.hc-sc.gc.ca/ewh-sem/pubs/radiation/radio\_guide-lignes\_direct-eng.php</a>

"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

"Este produto está homologado pela ANATEL, de acordo com os procedimentos regulamentados pela Resolução 242/2000, e atende aos requisitos técnicos aplicados" Para maiores informações, consulte o site da ANATEL <u>www.anatel.gov.br</u>

-	Modelo: 1401	Modelo: 1402			
" Este equipan não tem direito mesmo de es interferência d	ARAATEL Agência Nacional de Telecomunicações 3221-14-6817 (01)07898581341451 mento opera em caráter secundário, isto é, o a proteção contra interferência prejudicial, stações do mesmo tipo, e não pode causar a sistemas operando em caráter primário."	Agéncia Nacional de Telecomunicações 4138-14-6817 (01)07898581341468 * Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário."			
China	BASE6200 (1401) Regulatory ID number HS6200 and HS6300 (1402) Regulatory ID	— CMIIT ID: 2014DJ4271 number — CMIIT ID: 2014DJ4272			
Indonesia	BASE6200 (1401) Regulatory ID number HS6200 and HS6300 (1402) Regulatory ID	- 37991/SDPPI/2014 3710 number - 38040/SDPPI/2014 3710			
Korea	a     해당 무선설비는 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없음 이 기기는 업무용(A급)으로 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.				
Custom Union	EHC				
<b>Taiwan</b> 依據低功率電波 公司、商號或使	注意! R輻射性電機管理辦法第十二條經型式認證合 用者均不得擅自變更頻率、加大功率或變更	·格之低功率射頻電機,非經許可, 『原設計之特性及功。			
第十四條低功率 應立即停用,並 低功率射頻電機	約頻電機之使用不得影響飛航安全及干擾合 改善至無干擾時方得繼續使用。前項合法通 領忍受合法通信或工業、科學及醫療用電波	·法通信;經發現有干擾現象時, i信,指依電信規定作業之無線電信。 i輻射性電機設備之干擾。			
Thailand	This telecommunication equipment conform	s 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	Very CO28 Not A hadrond area years a reason and Part 1 had a grant and a second and the Not A hadrond area years a reason and Not A hadrond a reason a reason and Not A hadrond a reason a				
UAE	BASE6200HS6200TRATRAREGISTERED NO.ER35444/14DEALER NO.102064010206401020640	HS6300 TRA ISTERED NO. R36227/14 EALER NO. 1020640			



#### 有毒有害物质或元素表

#### Table of Toxic and Hazardous Substances

部件名称			有毒有	有毒有害物质或元素				
Names of Parts	Toxic and Hazardous Substances or Elements							
	铅 (Pb)	镉 (Cd)	汞 (Hg)	六价铬 (Cr6+)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)		
6200基站 Top assembly BASE6200 (G29124-2ZA1)	x	о	ο	0	ο	ο		
基站电路板 Audio PCB (G29113-2A1)	x	о	0	ο	o	ο		
收发器电路板 XCVR PCB (G28381-1D1)	x	o	ο	ο	ο	ο		
AC50电池充电器 AC50 G28550-1	х	ο	ο	0	ο	0		
电源器 453G018 CCC P/S	ο	ο	0	0	ο	ο		

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。



#### 表的有毒有害物质

#### **Table of Toxic and Hazardous Substances**

部件名称			有毒有害	唐物质或元素		
Names of Parts		Toxic and	Hazardous	Substances	or Element	s
	铅 Pb	镉 Cd	汞 Hg	六价铬 Cr6+	多溴联苯 PBB	多溴二苯醚 PBDE
HS6200头佩戴式耳麦 Top Assembly HS6200 (G29090-4B23)	x	ο	ο	ο	ο	ο
<b>耳机</b> 电路板 PCB (G29089-1)	x	о	ο	ο	ο	о
电池 Battery (104G044)	ο	ο	ο	ο	о	о
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。						

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HS6200头佩戴式耳麦 Top Assembly HS6300 (G29090-SC33)	x	ο	ο	ο	o	ο	
<b>耳机</b> 电路板 PCB (G29089-1)	х	ο	0	ο	ο	ο	
电池 Battery (104G044)	ο	ο	ο	ο	о	ο	

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Names of Parts	Toxic and Hazardous Substances or Elements						
	铅 Pb	镉 Cd	汞 Hg	六价铬 Cr6+	多溴联苯 PBB	多溴二苯醚 PBDE	
HS6200头佩戴式耳麦 Top Assembly BP6200 (G29382-1A3)	x	ο	ο	ο	ο	o	
<b>耳机</b> 电路板 PCB (G29371-1)	х	ο	ο	ο	ο	o	
电池 Battery (104G044)	ο	ο	ο	ο	ο	ο	
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。							

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# General battery safety instructions for battery model BAT50

#### **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 ٠ 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 nonconducting 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 gualified 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

# 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

#### 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 contenants 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

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 : <u>http://earth911.com</u>

# Instrucciones generales de seguridad para baterías para cada modelo de batería: BAT50

# 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.

#### <u>Al usar la batería</u>



#### ¡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 recalentarse, 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 usando objetos metálicos (como un alambre).
- No almacene ni lleve las baterías junto con collares, horquillas u otros objetos metálicos.
- No perfore 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 almacene 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, aísle 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 lejos de materiales inflamables o corrosivos.

#### ¡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.

# $\wedge$

#### ¡ADVERTENCIA!

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

#### <u>Tipos de cargador</u>

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 cigarrillos 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 pegue la siguiente dirección en su navegador y, luego, introduzca su código postal para obtener una lista de los centros de reciclaje: http://earth911.com

## 배터리 모델의 일반적인 배터리 안전 지침: BAT50

BATXX 배터리는 다음 회사에서 제공하는 제품과 함께 사용하도록 특별히 설계되었습니

다: HM Electronics Inc. (HME)

# 안전 주의사항

배터리의 안전과 신뢰성을 보장하려면 이 섹션의 지침을 따르십시오.

#### 배터리사용



#### 배터리 팩을 개조하거나 과도하게 사용하지 마십시오.

리튬 이온 셀 및 배터리 팩을 개조하거나 과도하게 사용하면 뜨거워지거나 폭발하거나 발화되어 심각한 부상을 입을 수 있습니다.

## 아래의 안전 지침을 따르십시오:

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- 배터리를 거꾸로 연결하지 마십시오. 그러면 극성이 바뀌게 됩니다.
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- 배터리에 직접 납땜하지 마십시오.
- 배터리를 물이나 바닷물 또는 높은 습도에 노출시키거나 젖지 않도록 하십시오.
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- 배터리를 직사광선이 비치는 곳에 두거나 더운 날씨에 자동차 안에서 사용하거나 보관하지 마십시오. 그러면 배터리가 뜨거워지거나폭발하거 나 발화할 수 있습니다. 그러한 방식으로 배터리를 사용하면 성능이 저하되거나 예상 수명이 단축될 수 있습니다.
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- 배터리를 사용, 충전하거나 보관하고 있는 동안, 배터리에서 이상한 냄새가 나거나 뜨거워지거나 색이나 모양이 변하거나 기타 비정상적인상 태를 보이면 즉시 사용을 중단하십시오.
- 전자레인지, 고압 용기 또는 인덕션 조리기구에 배터리를 넣지 마십시오.
- 배터리를 어린이의 손이 닿지 않는 곳에 두십시오.
- 배터리를 보관하거나 운반하기 전에 항상 분리하십시오.
- 항상 가연성 또는 부식성 물질이 없는 밀폐된 방염 용기 안에 배터리를 보관하십시오.

# 경고!

'n

/!\

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 뜨거워지거나 폭발하거나 발화되어 심각한 부상을 입을 수 있습니다.

# <u>충전기 유형</u>

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 뜨거워지거나 폭발하거나 발화되어 심각한 부상을 입을 수 있습니다.

- HME/Clear-Com 사용 설명서의 충전 지침에 나오는 대로 충전되지 않으면 배터리를 계속 충전하지 마십시오.
- 배터리를 외부 충전기, 전원 플러그 또는 자동차의 시가 라이터에 직접 연결하지 마십시오.
- 충전하기 전과 충전한 후에 항상 배터리를 육안으로 점검하십시오.
- 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 수있습니다.

# 배터리 재활용

배터리의 수명이 다하면 유자격 재활용 업체나 위험 물질 취급업체를 통해 다 쓴 배터리를 폐기 처리해야 합니다. 이 배터리가 일반 쓰레기와 함께 섞이지 않도록 하십시오.

회사나 주거지에 배터리 재활용 프로그램이 없는 경우, 다음 URL로 이동하거나 브라우저에 URL을 복사하여 붙여넣고, 재활용 센터 목록의 우편번호를 입력하십시오: <u>http://earth911.com</u>

1	INTO	
1.		
~		
2.	EQUI	
	2.1	Base Station Features
	2.2	Headset and Belt-Pac Features
•	2.3	Battery Charger
3.	PREI	
	3.1	Tools Required
	3.2	Interference Prevention
_	3.3	Hop Band: Radio Frequency Interference
4.	EQUI	PMENT INSTALLATION 12
	4.1	Base Station Installation
	4.2	Drive-Thru Layouts
	4.3	Cable Pulling
	4.4	Outside Microphone/Speaker Installation & Cable Connections
	4.5	Optional External Vehicle Detector Installation 25
	4.6	Optional HME Vehicle Detector Board (VDB) Installation
5.	BASE	<b>E STATION SETTINGS</b>
	5.1	Settings Status
	5.2	Basic Installer Setups
	5.3	Advanced Installer Setups
	5.4	Dual-Lane Installer Setup  39
	5.5	Network Settings
	5.6	User Settings
	5.7	Dual-Lane Message Center Settings  70
	5.8	PC Navigation
6.	AUDI	O PROCESSING FUNCTIONS
	6.1	VAA (Variable Audio Attenuation)
	6.2	ANC (Automatic Noise Cancellation) 86
	6.3	AVC (Automatic Volume Control)
	6.4	Echo Cancel
	6.5	Inbound Noise Cancel
	6.6	Outbound Noise Cancel
7.	SYST	<b>EM FUNCTIONAL CHECK</b>
8.	SYST	<b>EM FUNCTIONAL CHECK</b>
	8.1	Changing Headset Languages
	8.2	Obtaining Headset Status
	8.3	Headset Communication Modes (Single and Dual-lane operation)
	8.4	Tandem Operation (two speaker posts in one lane)
	8.5	Internal Communication
	8.6	Wired Backup System
9.	TRO	UBLESHOOTING
10	. SET	THE BASE STATION LANGUAGE
11	. EOU	PMENT SPECIFICATIONS
12	BLO	CK DIAGRAM
13	BASE	CINTERFACE DESCRIPTION
	13.1	Audio Circuit Board
	13.2	Switcher Circuit Board
	13.3	Vehicle Detector Circuit Board (Optional)
14	WIRI	NG DIAGRAMS

Figure 1.	EOS   HD standard equipment	2
Figure 2.	Base station front panel features	3
Figure 3.	Base station rear panel features	4
Figure 4.	Headset control buttons and indicator lights	5
Figure 5.	Belt-pac control buttons and indicator lights	5
Figure 6.	Correct wearing of the headset	6
Figure 7.	Headset battery-release button.	6
Figure 8.	Correct wearing of the headset	7
Figure 9.	Battery Removal.	7
Figure 10.	Battery charger power adapter connection	8
Figure 11.	Changing plug in international power adapter	8
Figure 12.	AC50 features and battery status guide	9
Figure 13.	Typical drive-thru store layout	13
Figure 14.	Typical tandem, Y-lane and dual drive-thru layouts	14
Figure 15.	Antenna mounting	15
Figure 16.	Power supply connection to base station	15
Figure 17.	Open base station showing four screw holes.	19
Figure 18.	Remote antenna mounting on wall bracket	20
Figure 19.	DM5 Microphone	22
Figure 20.	Placement of DM5 Microphone and foam in the foam enclosure	22
Figure 21.	Microphone unit in typical speaker post installation	22
Figure 22.	SP10 with gasket and cable connector plug	23
Figure 23.	SP10 in speaker post, menu board or enclosure	23
Figure 24.	Attach brackets to speaker	24
Figure 25.	Typical tandem drive-thru layout	91
Figure 26.	S2 switch on Switcher Board	92
Figure 27.	Base station internal connectors and controls	95
Figure 28.	Typical EOS   HD Base Station block diagram	99
Figure 29.	Full-Duplex Drive-Thru System with VDB but no Switcher Board (Lane 1 or Single Lane connections)	103
Figure 30.	Full-Duplex Drive-Thru System with VDB but no Switcher Board (Lane 2 connections)	104
Figure 31.	Full-Duplex Drive-Thru System with VDB, Switcher Board and IC300 (Lane 1 or Single Lane connections)	105
Figure 32.	Full-Duplex Drive-Thru System with VDB, Switcher Board and IC300 (Lane 2 connections)	106
Figure 33.	Full-Duplex Drive-Thru System with VDB, Switcher Board and Microphone (Lane 1 or Single Lane connections)	107
Figure 34.	Full-Duplex Drive-Thru System with VDB, Switcher Board and Microphone (Lane 2 connections)	108
Figure 35.	Half-Duplex Drive-Thru System with VDB but no Switcher Board (Lane 1 or Single Lane connections)	109
Figure 36.	Half-Duplex Drive-Thru System with VDB but no Switcher Board (Lane 2 connections)	110
Figure 37.	Half-Duplex Drive-Thru System with VDB and Switcher Board (Lane 1 or Single Lane connections)	111
Figure 38.	Half-Duplex Drive-Thru System with VDB and Switcher Board (Lane 2 connections)	112
Figure 39.	Optional Equipment	113

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.



Figure 1. EOS | HD standard equipment

	Optional E	Equipment	
Equipment	Product Number	Equipment	Product Number
Headset		Low-Profile Speaker	SP2500LP MM100 MS10 SW2 None itEC10 tEC20 ANT20-6

**IMPORTANT!** Before doing anything else, set up the battery charger and charge the batteries according to the instructions in <u>section 2.3</u>, 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



Figure 2. Base station front panel features

- 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.



Figure 3. Base station rear panel features

- 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  $\Lambda$  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  $\Lambda$  or **V button**, the beeps will continue until the button is released.



Figure 5. Belt-pac control buttons and indicator lights

# 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.



Figure 6. Correct wearing of the headset

# 2.2.3 Battery Removal and Replacement



Figure 7. Headset battery-release button

# 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

#### 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

# 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.





# 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.



Figure 12. Changing plug in international power adapter

# 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, <sup>1</sup>/<sub>8</sub> 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 <u>Section 5.3.4</u>.

# 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 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 <u>Section 2.3</u>, 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 <u>Speed Team</u> (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



Figure 13. AC50 features and battery status guide

# 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 <u>Section 5.6.2</u>, 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 <u>Section 4.2.9</u>, 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.

# 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 <u>Sections 4.3 and 4.4</u>, pg. 20.





# EQUIPMENT INSTALLATION

# 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**.

Figure 15. Antenna mounting

# 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.



Figure 16. Power supply connection to base station

# 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.





# 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.

HE	ADSET REGISTRATION
0	headsets are registered.
15	more can be registered.
w	hat would you like to do?
<clear inactive</clear 	Audio Fidelity: Non-HD Radio Mode: Non-AFH
<b>∢</b> Clear all	Register; headsets

# 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.



Figure 17. Open base station showing four screw holes

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.



# 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 <u>Section 1.1</u>, 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  $\frac{1}{2}$  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 <u>Section 14</u>, 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.



Figure 19. DM5 Microphone

- 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 <sup>1</sup>/<sub>4</sub> to <sup>1</sup>/<sub>2</sub> 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 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.



Figure 22. SP10 with gasket and cable connector plug



Figure 23. SP10 in speaker post, menu board or enclosure

#### 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

- 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 the installation instructions provided. Connect it to the base station according to the appropriate wiring diagram listed in <u>Section 14</u>, 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 <u>Section 14</u>, 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.
- 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 <u>Section 14</u>, 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 <u>Section</u> <u>14</u>, 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 <u>Section 14</u>, 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



#### 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  $\checkmark$  (on) or – (off) setting is also available.

See <u>Section 5.4.2</u>, 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:



**Note:** If you make a mistake, you can use the  $\triangleleft$  and  $\triangleright$  **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).

INSTALLER SETUP				
Configure lane: Single Single/A2	Configure≯ menus			
Split B: Combined Split	ClearSound			
Auto Handsfree (AHF): 🖌 🗖	Diagnostics >			
∢Speaker post	More			

# 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  $\checkmark$  (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  $\checkmark$  (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.

	INSTALLER S	SETUP
/	Configure lane: Single <mark>Single/A2</mark>	Configure) menus
	Split B: Combined Split	ClearSound
	Auto Handsfree (AHF): 🖌 🗖	Diagnostics >
	<b>∢</b> Speaker post	More

INSTALLER	SETUP
Configure lane: Single Single/A2	Configure≱ menus
	ClearSound
Auto Handsfree (AHF): 🖌 🗖	Diagnostics <b>&gt;</b>
<b>∢</b> Speaker post	More>

#### 5.2.3 Speaker Post



# 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 <b>Configure menus</b> on the INSTALLER SETUP display.	INSTALLER SETUP Configure lane: Single Single/A2 Configure menus ClearSound Auto Handsfree Diagnostics (AHF):  Single More More
<ul> <li>2. On the CONFIGURE MENUS display, select a setting and highlight ✓ (on) or - (off).</li> <li>If - (off) is selected, the messages menu for that setting will be hidden from the MESSAGE CENTER MENU.</li> <li>No one will have access to those Message Center settings, unless an administrator resets the respective setting by selecting ✓.</li> <li>To save the setting, press the <b>Back button</b>.</li> </ul>	CONFIGURE MENUS Customer Greeter: Customer messages: Customer messages: Customer messages: Customer Greeter: Customer Gre

# 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.



#### 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



# 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.



#### 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.



**Note**: When setting the **Phone** function to  $\checkmark$  (on), you must also select a **Phone Headset** to receive the calls (see <u>Phone Headset</u>, pg. 82). An optional Telephone Interface is also required. See <u>Figure 39</u>, 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:



**CAUTION**: *Making this change will require re-registering all headsets.* 

#### 5.3.3 Line In/Out Routing



**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 <u>Section 3.3</u>, pg. 11, for descriptions of the Hop Band options.

The **AUX Sync** option can be set to  $\checkmark$  (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  $\checkmark$  (on), allowing the base station to operate in Full Band. See <u>Section 3.3</u>, pg. 11, for more information on AFH mode.

RADIO OPTIONS				
Hop band: Low High <mark>Full</mark>				
Aux sγnc: ✔ ■	Adaptive Freq (AFH): 🖌 🗖			
Aux No: 2 3				
<b>∢</b> Register aux base				

#### 5.3.5 **Vehicle Tone**



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.

cle tone**>** ABASE

#### 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.

ADVANCED INST	ALLER SETUP	ADVANCED	INSTALLER SETUP
<b>∢</b> Phone	Vehicle tone <b>≯</b>	∢Phone	Vehicle tone
∢Audio Fidelity	Save installer <b>⊁</b>		ISTALLER DATABASE
∢Line In/Out routing	Language≯	Status: Saving in: settings	staller
<b>∢</b> Radio options	Restore factorγ≱ defaults		defaults

# 5.3.7 Language Selection

ADVANCED INSTALLER SETUP **1.** To select a preferred language, press the **Language** button on the ADVANCED INSTALLER SETUP Phone Vehicle tone> display. Audio Fidelity Save installer <Line In/Out routing Language > Restore factory> Radio options defaults SELECT LANGUAGE 2. On the SELECT LANGUAGE display, press the Select Select language: language button to highlight English, Spanish or English French. Spanish French Press the **Back button**, and the base will automatically reset and switch to the newly chosen language.

# 5.3.8 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.

Configure Lane: Single Single/A2 Dual/Y Tandem	Configure≯ menus
Split B: Combined Split	ClearSound
Auto Handsfree (AHF): ✓	Diagnostics)
<speaker post<="" td=""><td>More≯</td></speaker>	More≯

# 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:



# 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:



# 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  $\triangleleft$  and  $\triangleright$  **buttons** to move the highlight to each number you would like to change, and press the + or – **button** to enter the desired number.







## 5.5.2 Advanced Network Settings

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







# 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.





EMAIL SETTINGS 5. Email addresses – The Source Address is pre-set to Emails: SMTP port> hme-base6200-XXXXX@hme.com. 1 25 **«SMTP Server:** This is the address displayed in the "From:" line on alert emails sent to selected destinations. **«**SMTP User: Email addresses Destination email addresses are sent emails when the **SMTP** password: Emails option is set to  $\checkmark$  (on). To change the Source Address or Destination addresses, press the **Email** EMAIL ADDRESSES addresses button available on the EMAIL SETTINGS Source address: Destination4: display. hme-base6200-0... destination1: Destination5:> To enter or edit an email address, press the Source Address or any **Destination address button** on the (Destination2: EMAIL ADDRESSES display. Destination6:> destination3: Destination7:> Use the **Erase button** to clear a current address. Use the  $\blacktriangleleft$ ,  $\triangleright$ ,  $\blacktriangle$  and  $\triangledown$  **buttons** to highlight a character, and then press the **Sel** (select) **button** to enter it in EDIT DESTINATION ADDRESS the highlighted box. xample@co.net When you are finished, press the **Back button** to save the address. ABCDEFGHI JKLMNOP QRSTUVWXYZabcdef ghi jkimnopqrs<mark>t</mark>uv Sel wxyz0123456789 Erase

# ASE STATION SETTINGS

# 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.

venicie detectio	n:	Normal
Customer Greeter:		1
Lane config.:		Single
Speed Team:		-
For service:	1-800	-848-4468

MAIN MENU	J
<b>∢</b> Vehicle detection	Register≯ headsets
<b>∢</b> Operator mode	Service <b>&gt;</b>
<b>∢</b> Message Center	
∢Volume adjust	More≯

## 5.6.1 Vehicle Detection

<ol> <li>To test the vehicle detector function by simulating a vehicle arrival at the speaker post or menu board, select <b>Menu</b> on the LANE STATUS display and then press the <b>Vehicle detection button</b> on the MAIN MENU.</li> <li>Note: Be certain no car (or metal object) is present at the detection point.</li> </ol>	MAIN MENU Vehicle detection Register> headsets 4Operator mode Service> 4Message Center 4Volume adjust More>
<ul> <li>2. Press the Mode button on the VEHICLE DETECTION display and select Override.</li> <li>A vehicle alert tone will be heard in headsets, followed by inbound audio from the outside speaker.</li> <li>If enabled, a Customer Greeter message will also be heard. To return to normal operation, press the Mode button again and select Normal.</li> </ul>	VEHICLE DETECTION Mode: Normal Override
<ul> <li>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).</li> <li>When "Reset Completed" flashes on the display, press the Back button to exit.</li> </ul>	RESET VEHICLE DETECTOR Are you sure you want to reset Vehicle Detector(s)? Yes≯

# 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.



#### 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 <u>before</u> 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 prenamed 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 rerecorded 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) and14 messages that can be triggered by Network commands.
- > Alert messages (email) can also be configured to send to designated email recipients.

**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.

<sup>\*</sup> 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.

		NAME		CONTENT	
Customer Greeter messages are triggered by vehicle arrivals at the drive-thru during scheduled times for those messages to play.		All Day 1 All Day 2 Breakfast 1 Breakfast 2 Lunch 1 Lunch 2 Snack 1 Snack 2		Not pre-recorded	
		Dinner 1 Dinner 2 Store Clos	sed	Thank you for your visit, but we are currently closed. Please visit us again during our normal business hours. Hello, please pull forward to the next speaker. Thanks. * (Tandem	
		<ul> <li>Pull Forward *</li> <li>Hand Washing</li> <li>Sanitizer</li> <li>DR Trash</li> </ul>		drive-thru only)         Please wash your hands.         Please change sanitizer solution.         Please check the dining room trash.	
	REMINDER	HACCP Quality Cl Lot Check Restroom	heck Check	Please complete the HACCP shift checklist.         Please complete the shift quality check.         Please complete a parking lot check.         Please check the restrooms.	
triggered by time and day only.		Pre-Rush Post-Rush		Please complete the pre-rush tasks for your workstation. Please complete the post-rush tasks for your workstation.	
		Headset S Change La	tatus anguage	To change headset prompt language, press and hold A1 and volume down while turning on the power.	
		Hands Fre	e ON pty 1-3	To turn headset hands free mode on, press and hold B and volume up while turning on the power. Not pre-recorded.	
				•	
		NAME	EVENT	CONTENT	
Alert messages are triggered by input		Freezer Door	S1	The freezer door has been left open.	
signals, time and day or Network events.	<b>ST</b>	Cooler Door Bools	S2	The cooler door has been left open.	
In the <b>EVENT</b> column: <b>S#</b> refers to a switch-	LEF	Door Lobby	S3	The back door has been left open.	
triggered alert. <b>N#</b> refers to a Network-	A	Door	S4 S5	A guest has entered the lobby.	
triggered alert.		Empty	S5 S6	Not pre-recorded.	
		Empty	N1 – N14		

MESSAGE CENTER MESSAGES

## 1. Customer Greeter Message Settings



**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 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.

READY TO up 10 seconds play time he headset **B** 

EDIT CUSTOMER GREETER

REVIEW/RECORD MESSAGE

Record

Record

\*Review to hear message. \*Record to record message or Back button to exit.

Progress:

0 Secs

Press:

Review

#### **Message Schedule**

1. To choose the schedule for the selected message, press the <b>Schedule button</b> on the EDIT CUSTOMER GREETER display.	EDIT CUSTOMER GREETER Rename: All Day 1 Message: Schedule Construction Review/ Record Settings
2. On the SCHEDULE CUSTOMER GREETER display, press the button for the day you want the selected message to be played.	SCHEDULE CUSTOMER GREETER <ul> <li>✓Sunday</li> <li>✓Thursday&gt;</li> <li>✓Monday</li> <li>✓Friday&gt;</li> <li>✓Tuesday</li> <li>✓Saturday&gt;</li> <li>✓Wednesday</li> <li>Mon 08/22/16</li> </ul>
<ul> <li>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.</li> <li>When the desired time period is highlighted, press the Edit button.</li> </ul>	SELECT SCHEDULE TIMES (SUN)         Start       Stop       Select         1       06:00:00       10:00:00       -         2       10:00:00       14:00:00       -         3       14:00:00       17:00:00       -         4       17:00:00       20:00:00       -         5       21:00:00       06:00:00       -         6       06:00:00       06:00:00       -         7       06:00:00       06:00:00       -         Edit       -
<ul> <li>4. On the EDIT display, press the Scheduled button to turn the message √ (on) or - (off) for the selected time period.</li> <li>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.</li> <li>Press the Back button to save this setting.</li> </ul>	SELECT SCHEDULE TIMES (SUN) Start Stop Select 1 06:00:00 10:00:00 - 2 10:00:00 14:00:00 - 3 14:00:00 17:00:00 - EDIT Scheduled: V C Apply to all days? Yes No

**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**



**Note**: Customer Greeter messages are always directed to the drive-thru speaker in addition to these settings. See <u>Section 5.7.1</u>, 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 <u>Section 5.7</u>, pg. 70.

#### 2. Reminder Message Settings



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**


### **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**

Rename:	
Hang washing	
Message:	Priority High Low
Review/ Record	Schedule

<ol> <li>To choose the schedule for the selected message, press the Schedule button on the EDIT REMINDER MESSAGE display.</li> </ol>	EDIT REMINDER MESSAGE Rename: Hand Washing Message: Priority: High Low Review/ Record Settings
<ul> <li>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.</li> <li>Note: Reminder messages are triggered to play at the beginning of their selected schedule time period(s).</li> <li>On the EDIT display, press the Scheduled button to turn the message √ (on) or - (off) for the selected time period.</li> <li>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.</li> <li>Press the Back button to save this setting.</li> </ul>	SELECT SCHEDULE TIMES (WED)         Start       Stop         1       06:00:00       10:00:00         3       14:00:00       17:00:00         4       17:00:00       20:00:00         5       21:00:00       06:00:00         6       06:00:00       06:00:00         7       06:00:00       06:00:00         Edit>          SELECT SCHEDULE TIMES (WED)         Start       Stop         1       06:00:00       10:00:00         2       10:00:00       10:00:00         3       14:00:00       17:00:00         3       14:00:00       17:00:00         3       14:00:00       17:00:00         Apply to all days?          Yes       No

### **Message Playback Settings**



**Note**: After selecting  $\checkmark$  (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.



### 3. Alert Message Settings





### **Review or Record**



### **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.

<rename: Freezer Door</rename: 	Message Text:> Alert text msg 1
Message:	Priority: <
<pre>{Review/ Record</pre>	Schedule
Event: Switch 1	Settings>

### **Message Schedule**

<ol> <li>To choose the schedule for the selected message, press the Schedule button on the EDIT ALERT MESSAGE display.</li> </ol>	EDIT ALERT MESSAGE
2. On the SCHEDULE ALERT MESSAGE display, press the button for the day you want the selected message to be played.	SCHEDULE ALERT MESSAGE <ul> <li>✓Sunday</li> <li>✓Monday</li> <li>✓Triday&gt;</li> <li>✓Tuesday</li> <li>✓Wednesday</li> <li>Tue 08/23/16</li> </ul>
<ul> <li>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.</li> <li>When the desired time period is highlighted, press the Edit button.</li> </ul>	SELECT SCHEDULE TIMES (SUN)         Start       Stop       Select         1       06:00:00       10:00:00       -         2       10:00:00       14:00:00       -         3       14:00:00       17:00:00       -         4       17:00:00       20:00:00       -         5       21:00:00       06:00:00       -         6       06:00:00       06:00:00       -         7       06:00:00       06:00:00       -         Edit       4

E STATION SETTING

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.

_ (_	Start	Stop	Select	
1	06:00:00	10:00:00	-	
2	10:00:00	14:00:00	-	١.
3	14:00:00	17:00:00	-	4
		EDIT		
Schee	to all days	27		

**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**





### Alert Message Email



**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  $\blacktriangleleft$ ,  $\triangleright$ ,  $\blacktriangle$  and  $\lor$  **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.

	SEL	ECT EMAIL	DESTINA	TIONS
		Emails	On(🖌)	Off(-)
		E	ЛТ	
	Select	email destin	ation:	
	Apply 1 Yes	to all email ( No	destination	15?
$\succ$	4 Edit	destination	address	
	ED	IT DESTINA	TION ADDI	RESS
≻	•	ABCDEF	GHIJKLM WAXYZabo	
≻	Sel	ghijki wxyz01 #\$%&'(	mnopqrs 2345678	tuv 99!▲◀
$\succ$	Erase		<u>i^_`(i)</u>	

### 4. Message Schedule Times



# 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 <u>Section 5.6.3</u>, 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 speake**r or **Hear in Line Out buttons** to highlight **Lane 1**, **Lane 2** or **Lane 1/2**.



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. In/Out-bound Audio Volume

**1.** On the IN/OUTBOUND VOLUME display, select which volume you would like to adjust, and then use the + IN/OUTBOUND VOLUME and - **buttons** to raise and lower the volume level. Inbound audio: 1.3 The first two settings adjust the audio level to and Outbound audio: from the outside speaker/microphone and the third <sup>⊐</sup>15 setting will set the level of the outbound Customer Customer Greeter: Greeter message. <sup>-1</sup>0 Scheduled outbound When a volume is set to **0**, the function is turned Schedules Settings off. For dual-lane operations, these settings will be available for Lane 1 and Lane 2. IN/OUTBOUND VOLUME **2.** To schedule automatic volume level changes to the outside speaker, select Schedules and then Settings. Inbound audio: <sup>1</sup>1 3 Outbound audio: Note: This Outbound audio level will be active ⊐15 whenever any scheduled outbound audio level is not Customer Greeter: enabled. <sup>1</sup>1 0 Scheduled outbound Settings) Schedules Schedules EDIT SCHEDULE TIMES **1.** There are 7 possible time periods. These time periods Start Stop will only apply to scheduled outbound volume level 06:00:00 10:00:00 settings. They will not affect other message schedules.

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

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**.



EDIT SCHEDULE TIMES

Start:

Stop:

Start = Stop for 24-hours

06:00:00

10:00:00

Wed 08/24/16 07:43:44

Edit)

 $\triangleleft$ 

### Settings



# E STATION SETTING



### 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**.



# **E STATION SETTING**

### 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



### 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.



### Set Date or Time



### Set Store Hours



### **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.



### Set Password

<ol> <li>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.</li> <li>To set a password for the first time, press the Set password button on the STORE SETTINGS display.</li> </ol>	STORE SETTINGS Set date Set password≻ Wed 08/24/16 Set time B to Order 2 - 09:47:28 Taker: Set store hours Set store hours Set schedule More≻ times
<ul> <li>2. Use the ◄ and ➤ buttons to move the highlighted box in the Enter new password field.</li> <li>Use the + button to put alphabetic characters in the highlighted box, or the - button to put numeric characters in the highlighted box.</li> <li>Continuing down from A will take you to numeric characters. Continuing up from 9 will take you to alphabetic characters.</li> <li>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.</li> <li>After entering the entire new password, press the Back button twice to save the new password and return to the ADVANCED MENU.</li> </ul>	STORE SETTINGS SET USER PASSWORD Enter new password: Clear all times

Press the **B-to-Order Taker button** on the STORE SETTINGS display to select  $\checkmark$  (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.



### 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 <u>Section 6.1</u>, pg. 86, for more information on **VAA**.

# E STATION SETTINGS

### **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 <b>Restore installer settings button</b> on the ADVANCED STORE SETTINGS display.	ADVANCED STORE SETTINGS
2. Press the <b>Restore button</b> on the RESTORE INSTALLER SETTINGS display.	RESTORE INSTALLER SETTINGS Are γou sure? Pressing Restore will change all settings back to the Installer defaults. Restore►

### **AVC Setting**

Press the **AVC button** to select  $\checkmark$  (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.

ADVANCED STO	RE SETTINGS
∢VAA	_AVC
Restore installer settings	Phone 🔟 🕨
	LCD Contrast>

See <u>Section 6.3</u>, pg. 86, for more information on **AVC**.

### **Phone Headset**



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.



### 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 <u>Section 14</u>, 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 <u>Section 5.5</u>, 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.

🖉 MSN.com - Windows Internet Explorer						
0		×.	http://192.1	.68.105.	8/	
File	Edit	View	Favorites	Tools	Help	IP Address

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

Link: -	DHCP: -
IP Address:	192.168.1.96
Subnet:	255.255.0.0
Gateway	0.0.0.0
DNS1:	0.0.0.0
DNS2:	0.0.0.0
MAC address:	00.00.00.00.00.00

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.

		Main Mo	enu	Seconda	ry Menu
		Message Center			Edit buttons
Status	Schedule	Customer Greeter	Reminders	Alerts	
ana ana amin' ao amin' amin	Times:	Start	Stop		
Vehicle detection	1	07:00:00	22:00:00	Edit	
William Marine	2	10:31:00	01:00:00	Edit	
volume adjust	3	07:00:00	11:00:00	Edit	
Pagistar bandsate 4	4	17:00:00	20:00:00	Edit	
Register neddsets	5	11:01:00	01:00:00	Edit	
Message Center	6	01:01:00	00:00:00	Edit	
	7	06:00:00	06:00:00	Edit	
Store settings	8	06:00:00	06:00:00	Edit	
	9	06:00:00	06:00:00	Edit	
Installer settings	10	06:00:00	06:00:00	Edit	
	11	06:00:00	06:00:00	Edit	
Network settings	12	06:00:00	06:00:00	Edit	
Reports	-				
Diagnostics					
Transmitter					

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.

Save button

		Message Center		
Status	Schedule	Customer Greeter	Reminders A	lerts
Vehicle detection	Times:	Start	Stop	
	1	07 - 00 - 00 -	22	Save
Volume adjust	2	10:31:00	01:00:00	Edit
	3	07:00:00	11:00:00	Edit
Register headsets	4	17:00:00	20:00:00	Eda
	5	11:01:00	01:00:00	Edit
Message Center	6	01:01:00	00:00:00	Edit
	7	06:00:00	06:00:00	Edit
Store settings	8	06:00:00	06:00:00	Edit
Installer settings	9	06:00:00	06:00:00	Edit
	10	06:00:00	06:00:00	Edit
Network settings	11	06:00:00	06:00:00	Eda
	12	06:00:00	06:00:00	Edd
Reports	-			
Diagnostics				
Service				

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 <u>Section 5.7.7 - VAA Settings</u>, 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 <u>Section 5.2.5</u>, 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. <u>Section 5.7.7 - AVC Settings</u>, 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 <u>Section 5.2.5</u>, 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 <u>Section 5.2.5</u>, 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

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

# 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 <u>Full-duplex</u> 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 <u>Half-duplex</u> 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  $\Lambda$  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  $\Lambda$  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).
- $\bullet$  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)



Figure 25. Typical tandem drive-thru layout

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 <u>Section 5.6.3</u>, 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 <u>BHF mode</u>, 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 <u>Section 8.3</u>, 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 "<u>Split-B</u>", internal communication will be heard only by headset operators in their lane.

If the system was NOT set up for <u>Split-B operation</u>, all internal communication will be heard by operators in both lanes. See <u>Section 5.4.1</u>, 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

# 9. TROUBLESHOOTING

PROBLEM	PROBABLE CAUSE	SOLUTION	
"Battery failed" is heard in headset when	Battery may be defective.	Replace battery. Call HME.*	
power button is pressed.	Battery contacts may be dirty.	Clean battery contacts with alcohol.	
"Headset failed" is heard in headset when	Headset may be defective.	Use another headset. Call HME.*	
power button is pressed.	Battery contacts may be dirty.	Clean headset battery contacts with alcohol.	
	Outside speaker and microphone may not be properly installed.	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.	
Van haar van acho in haadaat aarnigaa	Outbound and/or inbound audio level may be set too high.	Set outbound audio level just high enough to be heard by customers. Lower inbound audio to comfortable level.	
when you speak into microphone.		Adjust VAA Level control to reduce inbound audio level when you are speaking into the headset microphone.	
	VAA controls may need to be adjusted.	Adjust VAA attenuation level to reduce inbound audio level when you are speaking into the headset microphone. <b>NOTE</b> : If the inbound level is too low, you will not hear the customer.	
	Power may be off at base station.	Be sure HME logo and other lights on base station are lit.	
		Check circuit breaker for building.	
	Power supply in base station may not be working.	Be certain power adapter is plugged into AC electrical outlet, and is connected to J3 on base station audio circuit board.	
No sound is heard in headset when you press button A and speak into microphone.	Headset power may not be on.	Press power button on headset. Be certain power light goes on and switches from red to green.	
	Volume may not be set correctly.	Adjust volume with Volume-up and down buttons.	
	Battery may be low or defective.	Check headset power light. If not lit, replace battery.	
	Headset may be defective.	Use another headset. Call HME.*	
	Headset may not be registered.	Register headset.	
	Headset power may not be on.	Press power button on headset. Be certain power light goes on and switches from red to green.	
Channel A or B is not working	Battery may be low or defective.	Check power light. If not lit, replace battery.	
Channel A of D is not working.	A1/A2 or B1/B2 light on base station does not light when button A or B is pressed.	Use another headset. Call HME.*	
	Headset may not be registered.	Register headset.	
Outbound sound is too low.	Outbound volume may be set too low for environment.	Adjust outside speaker volume level.	
	System may be set for speed team.	Check speed-team setting.	
No outbound sound; Customer cannot hear anything.	There may be loose wires on outside speaker or base station circuit board.	Check vehicle present light (car) on base station. Check outside speaker wire connections on J6 or J14 in base station and at outside speaker.	
	Defective speaker or base station.	Call HME.*	
Customer cannot be heard in push-to-talk	System may be set for speed team.	Check speed-team setting.	
(r 1 1) operation.	Base station may be set for wrong drive-thru mode (full or half-duplex). See Section 1.1.	Check drive-thru mode setting.	

PROBLEM	PROBABLE CAUSE	SOLUTION	
<ul> <li>You're hearing clicks and/or pops</li> <li>Voice breakup while talking</li> <li>"Busy" prompt in headset when a button is pressed</li> <li>Headset flashing red lights</li> <li>You're intermittently hearing "Lane 1" in headset</li> </ul>	The cause could be Radio Frequency Interference caused by a nearby Wi-Fi router or Wi-Fi access point.	See Hop Band: Radio Frequency Interference, Section 3.3. For further assistance, call HME. *	
Only intermittent voice can be heard in headsets.	Transmitter antenna connectors on base station transceiver circuit board may be loose or damaged.	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.*	
	Circuit board may be defective.	Call HME.*	
	VAA level is too sensitive.	Reduce VAA level.	
Personnel hear customers in ceiling	Circuit board may be defective.	Call HME.*	
other.	VAA level is too sensitive.	Reduce VAA level.	
Personnel hear customers in ceiling speaker or headsets, but cannot hear each	Circuit board may be defective.	Check to see if A1/A2 and B1/B2 lights on base station are lit when buttons are pressed. Call HME.*	
otner.	Defective headset.	Use another headset. Call HME.*	
No tone or sound is heard in ceiling	Power interruption may have caused vehicle detection circuit to be out of balance.	When no vehicle is in the drive-thru lane, reset vehicle detector.	
speaker or headsets when vehicle enters	System may be set for speed team.	Be certain speed-team setting is not set to ON.	
drive-thru lane.	Connector may be loose.	Check all connectors in base station. Call HME.*	
	There may be loose wires on base station circuit board.	Check all connections on base station circuit boards.	
Personnel cannot hear customers in ceiling	System may be set for speed team.	Be certain speed-team setting is not set to ON.	
speaker or headsets	Outside speaker, audio circuit board or vehicle detector board failed.	Call HME.*	
	VAA attenuation set too high	Reduce attenuation.	
Headset has intermittent sound	Battery may be low.	Replace battery.	
ficauset has interimitent sound.	Headset may be defective.	Use another headset. Call HME.*	
There is still sound in headset after all	Base station may be set to override position.	On the VEHICLE DETECTION menu, be certain the Mode setting is in the Normal position.	
customers have been served.	Vehicle detector may be locked up.	On the VEHICLE DETECTION menu, select <b>Reset Veh Detect</b> .	
Battery charger is not working.	Charger may not be plugged in.	Be certain charger is plugged in. If it still is not working, call HME.*	
"Registration failed" message heard in headset. Lights stay red.	Base station power not on.	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.	
	Registration button not pushed.	Repeat registration procedure. Call HME.*	

\* For assistance, call HME at 1-800-848-4468, or email support@hme.com.


- 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:

<ol> <li>Select Menu on the base station LANE STATUS display and then press the More button on the MAIN MENU.</li> </ol>	LANE STATUS          Vehicle detection:       Normal         Customer Greeter:       ✓         Lane config.:       Single         Speed Team:       –         For service:       1-800-848-4468         Menu       Store open         Wed 07/22/15       07:26:05
	MAIN MENU ∢Vehicle detection Register≯ headsets ∢Operator mode Service≯ ∢Message Center ∢Volume adjust More≯ ✓
<ul><li>2. On the ADVANCED MENU, press the Installer Setup button.</li></ul>	ADVANCED MENU Store settings Installer setup Network Diagnostics
<ul> <li>3. On the ENTER INSTALLER PASSWORD display, enter the 4-digit password in the highlighted box in the Enter Password field.</li> <li>See Section 5.2, pg. 27, for instructions for entering a password.</li> <li>Press the Continue button to access the INSTALLER SETUP display.</li> </ul>	ENTER INSTALLER PASSWORD  Enter Password:  H 04/18/16 15:06:29  Clear all Continue

_		INSTALLER SETUP	
ł.	display, and then select Language on the ADVANCED	Configure lane: Config Single Single/A2 mer	ure <b>&gt;</b> nus
	inombolik objer display.	ClearSou	und <b>&gt;</b>
	On the SELECT LANGUAGE display, press the <b>Select language button</b> to highlight the desired language.	Auto Handsfree Diagnost (AHF): ✔ 🗖	tics)
	After selecting the language, press the <b>Back button</b> to save the setting. The base station will automatically	∢Speaker post M	ore <b>&gt;</b>
	be reset to its previous operating mode.	ADVANCED INSTALLER SETUR	2
		<pre>4Phone Vehicle to</pre>	one≯
		∢Audio Fidelitγ Save insta	ller <b>&gt;</b>
		✓Line In/Out routing Langua	age≯
		∢Radio options Restore fact defau	ory≱ ults
		SELECT LANGUAGE	
		Select language: English Spanish French	

4

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# **11. EQUIPMENT SPECIFICATIONS**

# **Base Station**

Voltage input	
DC current input	2.5A maximum
Audio distortion	
Outside speaker output.	3 watts RMS into 8 ohms
Ceiling speaker power	3 watts RMS into 8 ohms
TX/RX frequency	
Dimensions	
	(248 mm x 330 mm x 89 mm)
Weight	

# <u>Headset</u>

Battery type	
Battery life	11 - 13 hours (typical)
RF frequency	2400MHz – 2483.5MHz
Weight	3.53 oz (100 gm) with battery

# **Battery Charger**

Voltage input	16.5VAC
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 $% \left( 12.03\right) = 100000000000000000000000000000000000$

# 12. BLOCK DIAGRAM



Figure 28. Typical EOS | HD Base Station block diagram

# **BLOCK DIAGRAN**

# **13. BASE INTERFACE DESCRIPTION**

# **13.1 Audio Circuit Board**

# J1 - Ceiling Speaker In/Out, Lane 1

- J1,1 Ground
- /A1 Talk J1,2 Relay 1 Common
- J1,3 J1.4 Relay 1 Normally Open
- J1,5 Relay 1 Normally Closed
- Ceiling speaker + J1,6
- 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
- -24VDC / 16VAC power input J3,2
- 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
- Door 3 J5,3
- Door 4 J5,4
- 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 Not used
- J7,5

# J9 – Early Warning / Alert, Lane 1

- J9,1 Early warning
- J9.2 Ground
- J9.3 Not used
- J9,4 Ground
- Alert in J9,5

# 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
- Relay 2 Normally Open J11.4
- 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
- Outside speaker -J13,9
- J13,10 Outside speaker +

# J14 - Interface w/o Switcher Board, Lane 2

- J14,1 Microphone 1
- J14,2 Microphone 2
- Ground J14,3
- J14,4 +12VDC
- J14,5 Negative vehicle detect input
- J14,6 Not used
- J14,7 Outside speaker -
- J14,8 Outside speaker +

# J15 - Telephone Interface

- J15,1 Telephone audio into base
- J15,2 12V
- J15,3 /A2 talk
- J15,4 /B2 talk
- J15,5 Car 2
- J15,6 Vehicle detect in
- J15,7 Ground
- J15,8 Telephone audio out to phone line

# J16 - Line In/Out, Lane 2

- J16,1 Line out
- J16,2 Ground
- J16,3 Line in
- J16,4 Ground
- J16.5 Not used

# **13.2 Switcher Circuit Board**

## J1 - DM5 Interconnect

- J1,1 Microphone in
- J1,2 Microphone in
- J1,3 Ground
- +12VDC J1,4
- J1,5 Not used

## J2 - Menu Board Interconnect

- J2,1 Speaker/microphone in/out
- J2,2 Speaker/microphone in/out
- J2,3 Shield
- J2,4 Speaker out
- J2,5 Speaker out

## J3 - Detector/Timer Interconnect

- J3,1 Loop
- J3,2 Loop
- J3,3 Positive vehicle detection signal (in)
- J3,4 Ground
- Negative vehicle detection signal (in) J3,5
- J3,6 Greet
- J3,7 Greet
- J3,8 Negative vehicle detection signal (out)
- J3,9 Ground
- J3,10 Positive vehicle detection signal (out)

## J4 - Backup System Interconnect

- J4,1 Loop
- J4,2 Loop
- J4,3 Negative vehicle detection signal (out)

# J19 - Early Warning / Alert, Lane 2

- J19,1 Early warning
- J19,2 Ground
- J19,3 Not used
- J19,4 Ground
- J19,5 Alert in

# J20 - Vehicle Detector Board

- Interface, Lane 2 (Secondary) J20,1 Negative vehicle detect signal
- J20.2 +12V Vehicle detector power
- J20,3 Ground
- J20,4 Not used
- J20,5 Not used
- J4,4 Ground
- J4,5 Positive vehicle detection signal (out)
- J4,6 Not used
- J4.7 Speaker/microphone in/out
- J4,8 Speaker/microphone in/out
- J4,9 +12V to +48V in
- J4,10 +12V to +48V in

## J5 - Audio Board Interconnect

- J5,1 Microphone 1
- J5,3 Ground
- J5,4 +12VDC
- J5,5 Positive vehicle detector input (not used)
- J5.6
- J5,7 Vehicle detector power
- J5,8 Not used
- J5.9 Outside speaker -
- J5,10 Outside speaker +

# - Vehicle Detector Board Interconnect

- J6,2 Vehicle detector power (12V)
- J6,3 Ground
- J6,4 Not used
- J6,5 Not used

# **TB1 – Connector for Internal Detector**

- Loop in 1
- 2 Loop in

# **13.3 Vehicle Detector Circuit Board (Optional)**

- P1 Audio Board Interface Cable Connector
- P1.1 Signal
- P1,2 Power
- P1,3 Ground

# **TB1 – Vehicle Detector Loop Connector**

- J5,2 Microphone 2

- Negative vehicle detector input

- **J6** 
  - J6,1 Vehicle detector signal

# 14. WIRING DIAGRAMS

# Full-Duplex Drive-Thru System with VDB but no Switcher Board

<u>Page 103, Figure 29</u> —	(Connections for Lane 1 or Single Lane)
<u>Page 104, Figure 30</u> —	(Connections for Lane 2 of Dual/Y-Lane or Tandem)

# Full-Duplex Drive-Thru System with VDB, Switcher Board and IC300 Intercom

<u>Page 105, Figure 31</u> —	(Connections for Lane 1 or Single Lane)
<u>Page 106, Figure 32</u> —	(Connections for Lane 2 of Dual/Y-Lane or Tandem)

# Full-Duplex Drive-Thru System with VDB, Switcher Board and Microphone

<u> Page 107, Figure 33</u> —	(Connections for Lane 1 or Single Lane)
<u> Page 108, Figure 34</u> —	(Connections for Lane 2 of Dual/Y-Lane or Tandem)

# Half-Duplex Drive-Thru System with VDB but no Switcher Board

<u>Page 109, Figure 35</u> —	(Connections for Lane 1 or Single Lane)
<u> Page 110, Figure 36</u> —	(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



Figure 29. Full-Duplex Drive-Thru System with VDB but no Switcher Board (Lane 1 or Single Lane connections)

with VDB but no Switcher Board (Lane 1 or Single Lane connections)



Figure 30. Full-Duplex Drive-Thru System with VDB but no Switcher Board (Lane 2 connections)

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)

# Underground Loop

# Timer System Alternate Greet Wiring

If using an Internal Message Repeater, connect System 30 Timer ground to base audio J1, 1.

- to J1, 1 to J1, 2 Connect an unused timer Vehicle Detect input (1-6) to base audio J1, 2. Assign the timer Vehicle (1-6) as GREET and configure for negative detection.
- to J1, 2 "A" Decode (Active Low)
- to J1, 3 Isolated Vehicle Detect Ground to J1, 4 Isolated Vehicle Detect Signal (Active Low)

to J1, 6=gn, 7=wh & 8=shld







Early Warning In (Active Low)
Ground
NC
Ground Switch closure to activate

to J9, 5 Alert In Alert Message 5



Wiring Diagram Full-Duplex Drive-Thru System with VDB, Switcher Board and IC300 (Lane 1 or single Lane connections)



with VDB, Switcher Board and IC300 (Lane 2 connections)



Figure 33. Full-Duplex Drive-Thru System with VDB, Switcher Board and Microphone (Lane 1 or Single Lane connections)

Speaker (optional)

Full-Duplex Drive-thru System with VDB, Switcher Board (Lane 1 or Single Lane connections)



Figure 34. Full-Duplex Drive-Thru System with VDB, Switcher Board and Microphone (Lane 2 connections)

(Lane 2 connections)



Figure 35. Half-Duplex Drive-Thru System with VDB but no Switcher Board (Lane 1 or Single Lane connections)

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)

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)

Half-Duplex Drive-Thru System with VDB and Switcher Board (Lane 1 or Single Lane connections)



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

Half-Duplex Drive-Thru System (Lane 2 connections)



Figure 39. Optional Equipment

**Optional Equipment** Wiring Diagram