NEXEO | HDX™
Crew Communication Platform

Installation Guide

REGULATORY AND SAFETY

FCC CERTIFICATION AND MORE:

Regulatory and Compliance information can be found online by going to Drive-Thru Headset Systems>NEXEO | HDX at: https://www.hme.com/qsr/drive-thru-user-manuals/

ESD HANDLING INSTRUCTIONS

CAUTION: Contains parts and assemblies susceptible to damage by Electrostatic Discharge (ESD). This device is sensitive to electrostatic discharge and should be installed by personnel trained in ESD awareness. Proper handling procedures include wearing anti-static wrist straps.

SAFETY NOTICE

CAUTION: Wear proper eye, ear, and body protection when grinding, drilling or working with tools. Follow the manufacturer's safety information and operational instructions for tools and materials. Be aware of your surroundings. Failure to heed such precautions can cause injury and/or property damage.

HYGIENE, HEALTH, AND SAFETY

Part of this installation requires working within a restaurant/store where food is prepared and customers dine. Please consult the restaurant/store manager, standard operating procedures and any additional restaurant safety/advisory protocols available before beginning work within the restaurant/store. Follow the instructions and guidelines provided.

BATTERY DISPOSAL

HME cares about the environment. Please consult the laws and regulations within your municipality regarding the proper disposal of expired or dead batteries.

DISCLAIMER

HM Electronics, Inc. is not responsible for equipment malfunctions due to erroneous translation of its publications from their original English version. Illustrations in this publication are approximate representations of the actual equipment, and may not be exactly as the equipment appears. They are subject to change without notice.

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WHAT'S IN THE BOX

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2. Headsets (HS7000) and batteries (BAT70)
3. Radio Transceiver (RT7000)
4. Battery Charger (AC70) with power adapter
5. Post Speaker/Mic (SM7000, shown), or IB7000 with DM5 Mic and SS7000 Speaker or SP10 (not shown)
6. Installation & User's Guide
7. Hardware and cables (not shown)
8. Acoustic Foam (not shown)

The system contents in the box will vary depending on the customer's order. Quantities of certain components such as headsets and batteries will also vary. However, the components listed here consist of the basic components that are generally included with a complete system.
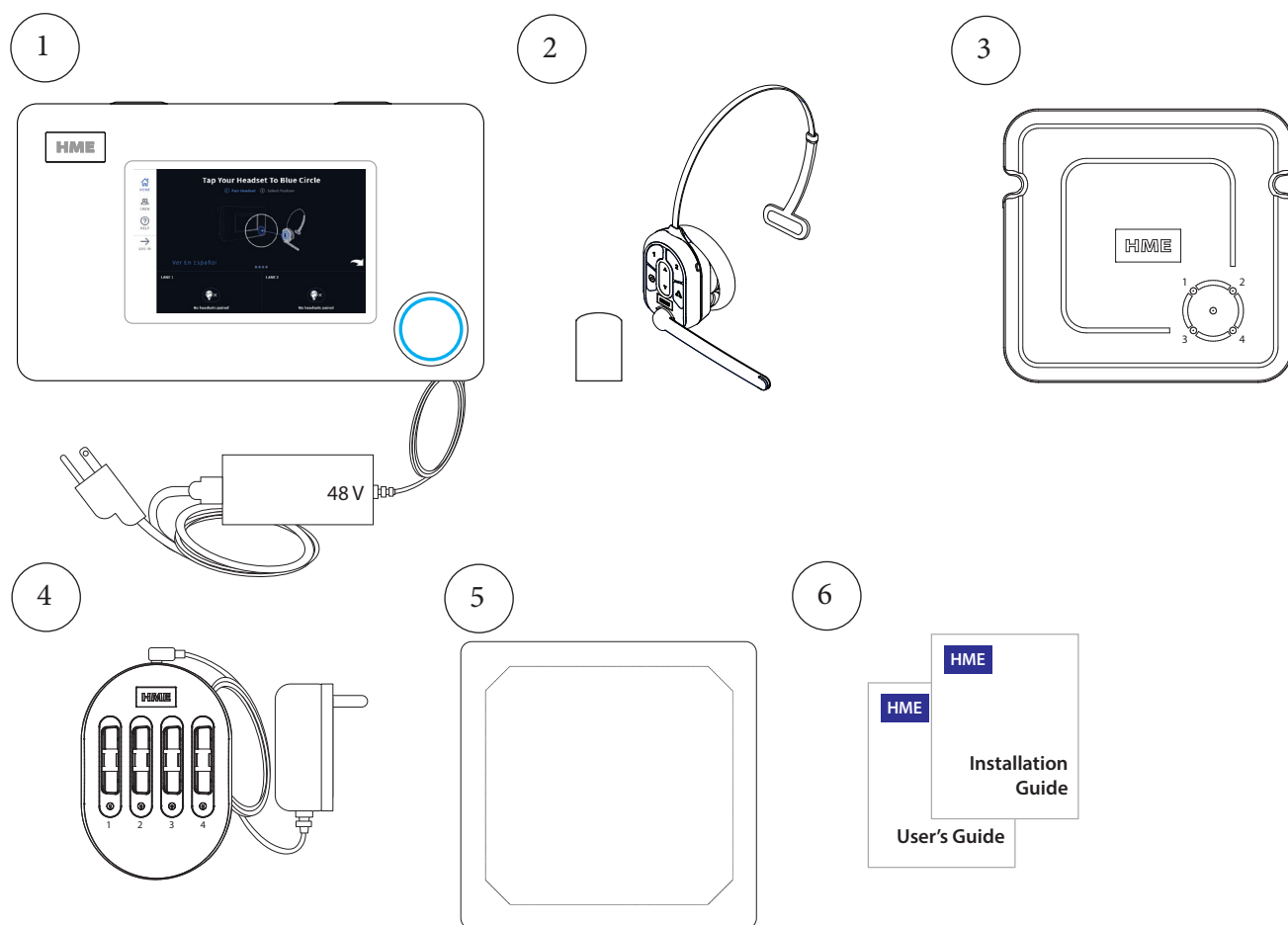
TOOLS/EQUIPMENT/MATERIAL REQUIRED

General Tools/Equipment
- General hand tools, screwdrivers, cutters, pliers, and wrenches
- Standard Drill (for wall mounts)
- Drill bit set (sizes 1/16" - 1/2")
- Wire strippers
- Soldering Iron and solder
- Tape measure
- Pencil/marker
- Crimp caps or shrink tubing with heat gun
- Serrated knife
- Cable pulling equipment: fish stick/tape, pull strings, etc.
- Ladder

Specialty Tools/Equipment
- N/A

Materials
- Cable ties (for bundling any cable slack, available at most hardware/home improvement stores).
- Hardware (while general hardware is provided for mounting system components, there may be situations when specialty hardware is required such as masonry screws for brick or concrete walls).
- Electrical tape, twist caps
- Audio cable
- Acoustic Foam

Safety Equipment
- Safety Glasses
- ESD grounding strap (for connecting to the PCBA in the Base Station)

HEADSET
(HS7000)

Vertical Mount Only
(this way up)

REMOTE TRANSCEIVER
(RT7000)

INTERNET
& CLOUD

BASE STATION
(BS7000)
SETUP & CONNECTION OVERVIEW

Latches
(Unlatch here to open housing)

Front View
(wall mounted)

Touchscreen

Headset
Pairing
Ring

48 V

BASE STATION
POWER SUPPLY

Note: Illustrations are not drawn to scale,
may differ to the actual product, and are
subject to change without notice.

WALL OUTLET

POST SPEAKER/MIC
SM7000 or IB7000

CEILING SPEAKER
(Optional)

BATTERY CHARGER
with POWER SUPPLY
(AC70)

Fig. 1.1

Wiring connections (Not all connections are required)

J200 (Line In/Out)

Pin #	Label	Descrptn/color
1	Line In	
2	GND	Ground
3	N/C	Not connected
4	Line Out	
5	GND	Ground

J600 (Ceiling Speakers)

Pin #	Label	Descrptn/wire color
1	Ceiling Spkr1 +	Speaker 1 positive
2	Ceiling Spkr1 -	Speaker 1 negative
3	GND	Ground
4	Ceiling Spkr2 +	Speaker 2 positive
5	Ceiling Spkr2 -	Speaker 2 negative
6	GND	Ground

J201 (Telephone Interface)

Pin #	Label	Description/wire color
1	Tel Audio In	
2	Tel Power +12V	
3	Tel Off Hook	
4	Tel PTT	
5	Tel Ring	
6	Tel Active	
7	Tel Ground	
8	Tel Audio Out	

J800 and J801 (Lane 1 & 2 Timer)

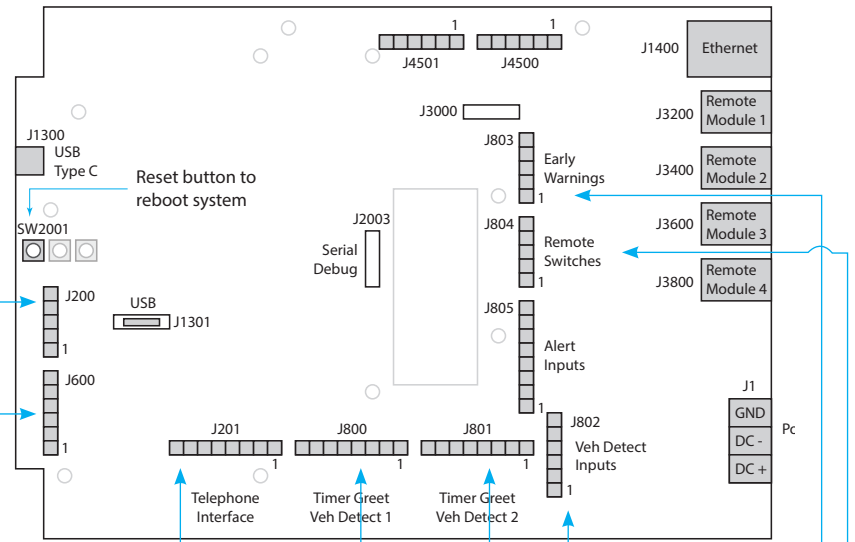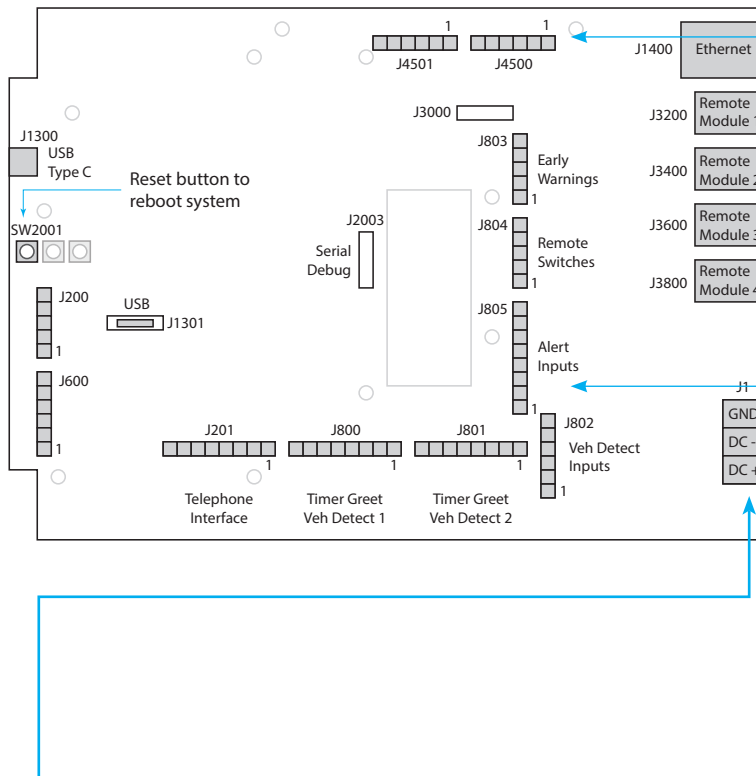| Pin #	Label	Description/wire color
1	Greet Out	Greet Out 1 for J800 Greet Out 2 for J801
2	GND	Ground for J800 and J801
3	N/C	Not connected
4	Alt Grt Out	Alt Greet Out 1 for J800 Alt Greet Out 2 for J801
5	GND	Ground for J800 and J801
6	Veh Det Out Com	Veh Det Out Com1 for J800 Veh Det Out Com2 for J801
7	Veh Det Out N.O.	Veh Det Out N.O.1 for J800 Veh Det Out N.O.2 for J801
8	Veh Det Out N.C.	Veh Det Out N.C.1 for J800 Veh Det Out N.C.2 for J801

Fig. 1.2

J802 (Vehicle Detect Inputs)

Pin #	Label	Description/wire color
1	+12 V	Power
2	N/C	Not connected
3	Veh Det In 1	Vehicle Detect In 1
4	GND	Ground
5	Veh Det In 2	Vehicle Detect In 2
6	GND	Ground

J803 (Early Warning Inputs)

Pin #	Label	Description/wire color
1	Erly Wrn In 1	Early Warn In 1
2	GND	Ground
3	N/C	Not connected
4	Erly Wrn In 2	Early Warn In 2
5	GND	Ground

J804 (Remote Switch Inputs)

Pin #	Label	Description/wire color
1	GND	Ground
2	OO in 1	Outside Order in 1
3	Ded in	Dedicated In
4	OO in 2	Outside Order in 2
5	GND	Ground

J4500 & J4501 (Spkr/Mic Interface)

Pin #	Label	Descptn/color
1	Spkr/Mic PL +	Red to PLC IN1 - 1
2	Spkr/Mic PL -	Black to PLC IN2 - 2
3	Shield	Shield to PLC GND - 3
4	Spkr/Mic PL +	
5	Spkr/Mic PL -	
6	Shield	

J805 (Alert/Alert Switch Inputs)

Pin #	Label	Description/color
1	Switch In 1	
2	Switch In 2	
3	Switch In 3	
4	GND	Ground
5	Switch In 4	
6	Switch In 5	
7	Switch In 6	
8	GND	Ground

Base Station Power Supply:

1. Terminate the positive wire of the power supply to J1 DC + terminal (pin 1).
2. Terminate the negative wire of the power supply to J1 DC - terminal (pin 2).
3. Terminate the shield to J1 GND terminal (pin 3).

Note: Only use the HME power supply provided with your system.

Before you begin

Survey the premises with store manager to determine the optimal mounting locations for each component. Take into consideration:

- The system requires a region code to function, so an internet connection and an HME CLOUD account are necessary. Connect and verify first before installing the RT7000.
- Cable lengths for the hardwired components such as the remote transceiver, network connections, etc., which may limit the possible locations available.
- Proximity to power outlet and network router.
- If mounting the Base Station in an area with high foot traffic, take into consideration carts and mobile shelving units, which can damage the Base Station if impacted.
- Finding a good location for the remote transceiver is critical (see Fig. 2.8, and 2.9). Also read about the "Remote Transceiver (RT7000)" on page 14 under Component Notes and review the Critical Steps in these instructions.

The Base Station and Connections

The Base Station is the control center and focal point of the NEXEO | HDX™ system. System features are configured here and all connections are terminated here. This is also where store personnel interact with the system when setting up profiles and pairing headsets. If you are replacing an existing HME product such as an EOS|HD® system, mounting the Base Station close to the same location of the Base Station you are replacing will enable you to use the existing wires/cables without having to route new wires. However, verify the wires/cables are in good condition before using.

> ⚠️ *CAUTION: Wear proper eye, ear, and body protection when grinding or drilling. Be familiar with the manufacturer's safety information and operational instructions for tools and materials. Be aware of your surroundings. Failure to heed such precautions can cause injury and/or property damage. Before drilling, also make sure the area behind the wall is free from electrical wiring and plumbing.*

Installing the System

1. The base station should be mounted in a location easily accessible by all crew members at all times (i.e., not in a locked office with limited access).
2. Mount the Base Station at an optimal height from the floor with the touchscreen visible and within easy reach to comfortably operate with fingers. The mounting height should be between shoulder and eye level for someone of average height (see Fig. 2.1). **Note:** Mounting height should also take into consideration personnel with disabilities, such as those requiring the use of a wheelchair.
3. There are two latches along the top side of the Base Station (see Fig. 2.2). Unlatch these to open the Base Station cover (the cover does not completely detach as it is hinged on the bottom side). Four mounting holes are visible, one at each corner through

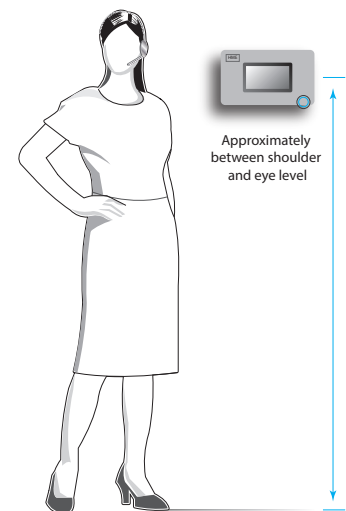

Approximately between shoulder and eye level

Fig. 2.1

the legs (see Fig. 2.3). Use a pencil to mark the wall through these holes (avoid touching the exposed PCBA unless you are wearing a ground strap). Drill four pilot holes (3/16" drill bit). Push the four plastic anchors into the holes until flush and insert the four screws provided, but do not tighten. Leave enough space to mount the Base Station over the head of the screws and slide into the slots. Tighten screws to secure the Base Station.

4. Mount the power supply. Mark the mounting location on the wall through the mounting holes on each side. Mount the power supply using the hardware provided. Terminate the power supply to the Base Station (see "Wiring Diagram's" Fig. 2.10, 2.11 and wiring connections on page 5).

5. **Critical Step:** Loosely mount and connect the RT7000 (Fig. 2.4 & 2.5) in a central location for optimal coverage (until range tested in steps 9 & 10 with the Installation Wizard). For example, notice Fig. 2.10 and 2.11. They show two different store layouts with specific targeted areas where the headsets are primarily used. In these examples, the location selected for the RT7000 (represented by the small blue rectangle) offered the best coverage indicated by the blue circled areas. Each store required the RT7000 to be mounted in a different but central location to provide the best all-around coverage unique to the store's need. Store layout and obstructions also affected placement and range. (see "Component Notes" on page 14 for more details on the RT7000 placement).

> ⚠️ CAUTION: If the RT7000 needs to be relocated, wait at least 5 seconds after unplugging it before reconnecting the cable to the same base station port. This allows time for the system to turn off power to the port, connecting to a live port can damage the circuitry. Or, reconnect it to a different port.

6. Install the other components such as the post speakers, etc. If installing a new system with Speaker/Mic SM7000 use Fig. 2.12 as a wiring reference.
However, if connecting a DM5 microphone and SS7000 speaker or SP10 speaker, you must also use the IB7000. Use Fig. 2.13 as a wiring reference and see "Component Notes." for more installation details.

7. Route and terminate all component cables to the Base Station using the wiring references in this guide. Consult the store's IT personnel when connecting to the network router.

8. Terminate the Base Station power supply and connect to outlet. The Base Station turns on automatically and will perform a self-check to determine that all is good and ready to go.
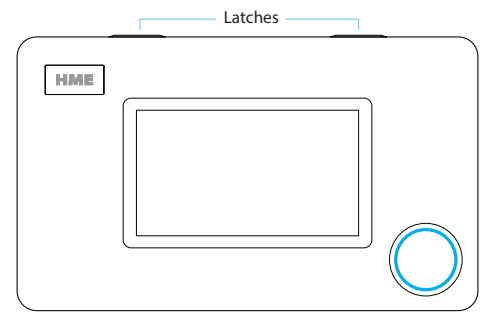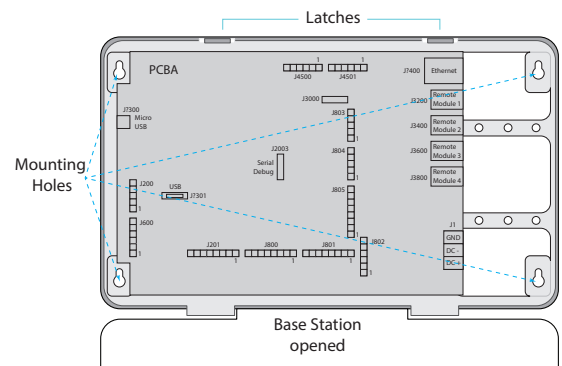
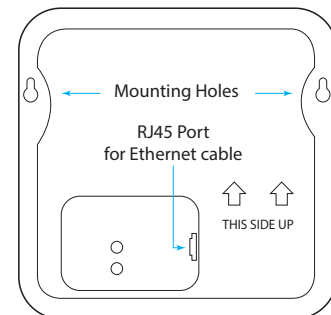

Fig. 2.2

Fig. 2.3

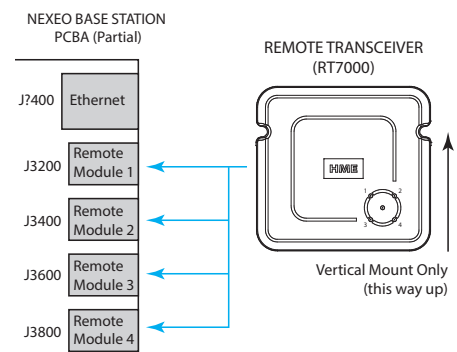RT7000 TRANSCEIVER
Rear View

Fig. 2.4

Fig. 2.5

9. On the Base Station UI, follow the Installation Wizard to connect and configure the system (see Fig. 2.6).
   Note: If you accidentally exit the Installation Wizard and need to return to it. LOG IN to the Base Station, go to SYSTEM, then the TROUBLE-SHOOTING tab and select "Installation Wizard" from the drop-down menu. Tap the "Start Installation Wizard" button.

10. **Critical Step**: At the Configure stage of the Installation Wizard, the Transceiver Installation Step 2 screen prompts you to use a paired headset switched into Reception Location Mode (Fig. 2.7). When you pair a headset at this step, the Reception Location Mode indicator turns from 🔴 OFF to 🟢 ON (Fig. 2.8). Tap "Continue" to move to Transceiver Installation Step 3. You will need to walk all areas of the store where the headset will be used to ensure a good signal. The Boom LED at the tip of the Headset microphone flashes different colors to indicate areas with strong or weak reception (The NEXEO screen displays this color-coded range which is also shown here in Fig. 2.9). Depending on the results, you may have to reposition the Remote Transceiver before finding the optimal location.
    Note: Depending on the size and layout of the store, some stores may require more than one Remote Transceiver to provide adequate coverage. Also see CAUTION note for Step 5.

11. Once the optimal location for the Remote Transceiver has been verified. Secure all the loosely mounted system components.

12. Test audio levels between the headsets and the drive-thru ordering points, adjust accordingly using the volume controls on the Base Station UI.

13. Use cable ties to bundle and strain relief the cables exiting the Base Station to one of the crossbars on the rear housing.

14. Close the Base Station. The system is now ready for use.

Note: See "Component Notes" on page 14 for more details on system components and installation. If you are alerted concerning a fault or failure, verify the system is configured properly through the Installation Wizard found under SYSTEM>TROUBLESHOOTING. Also, reference "Help" on page 25 of this guide.
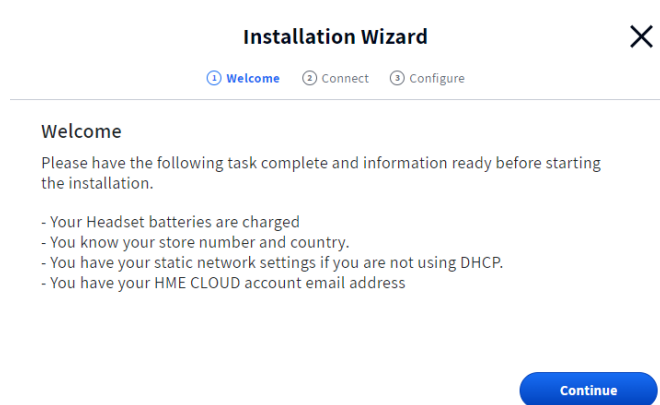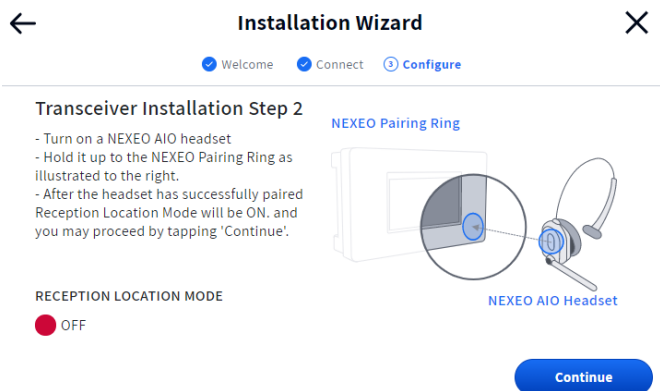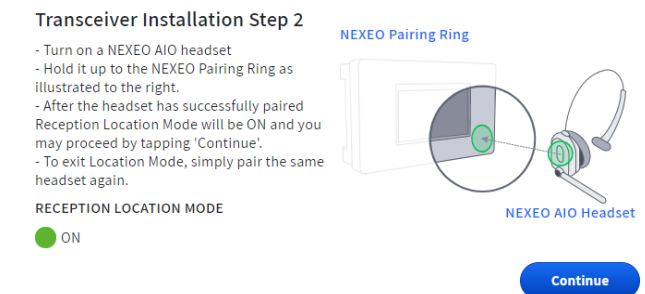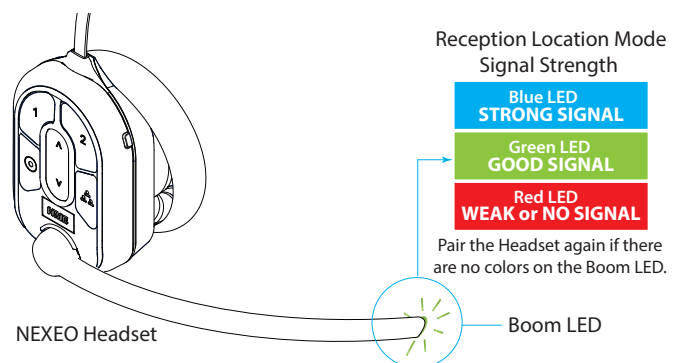

Fig. 2.6

Fig. 2.7

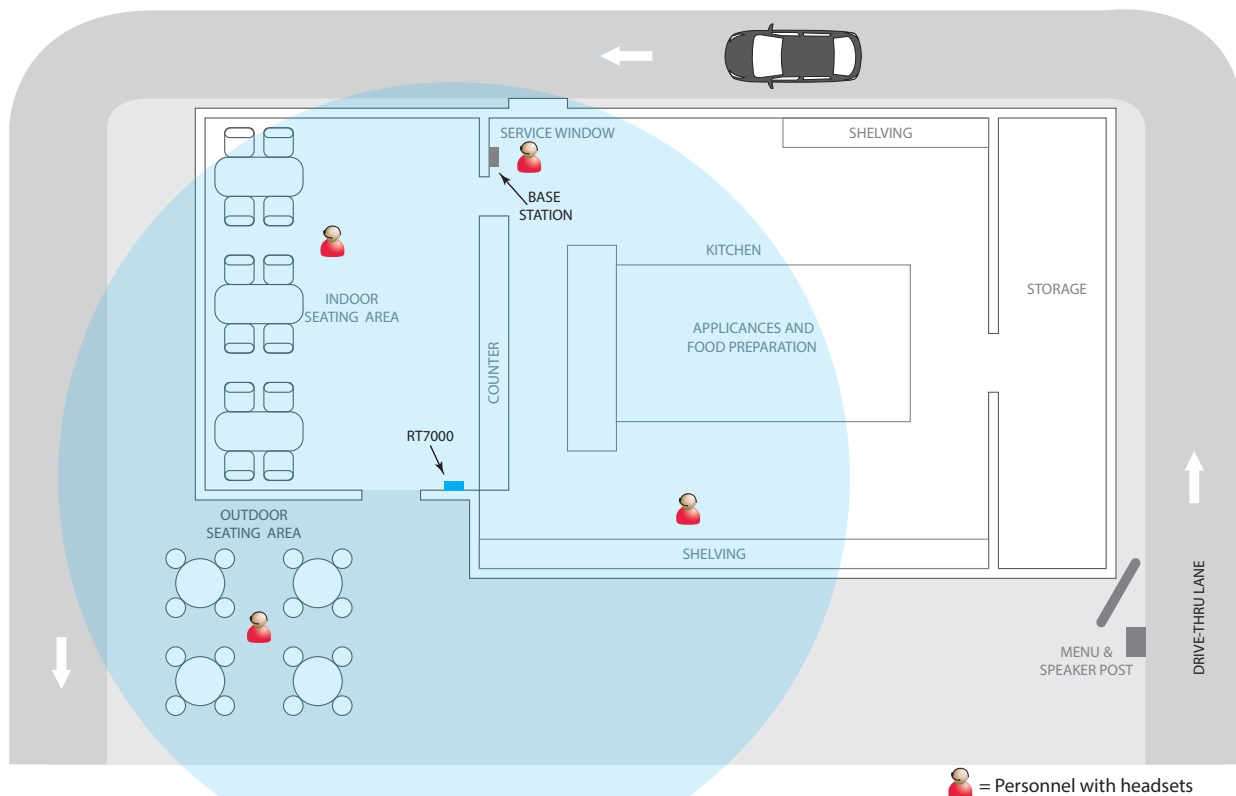
Fig. 2.8

Fig. 2.9

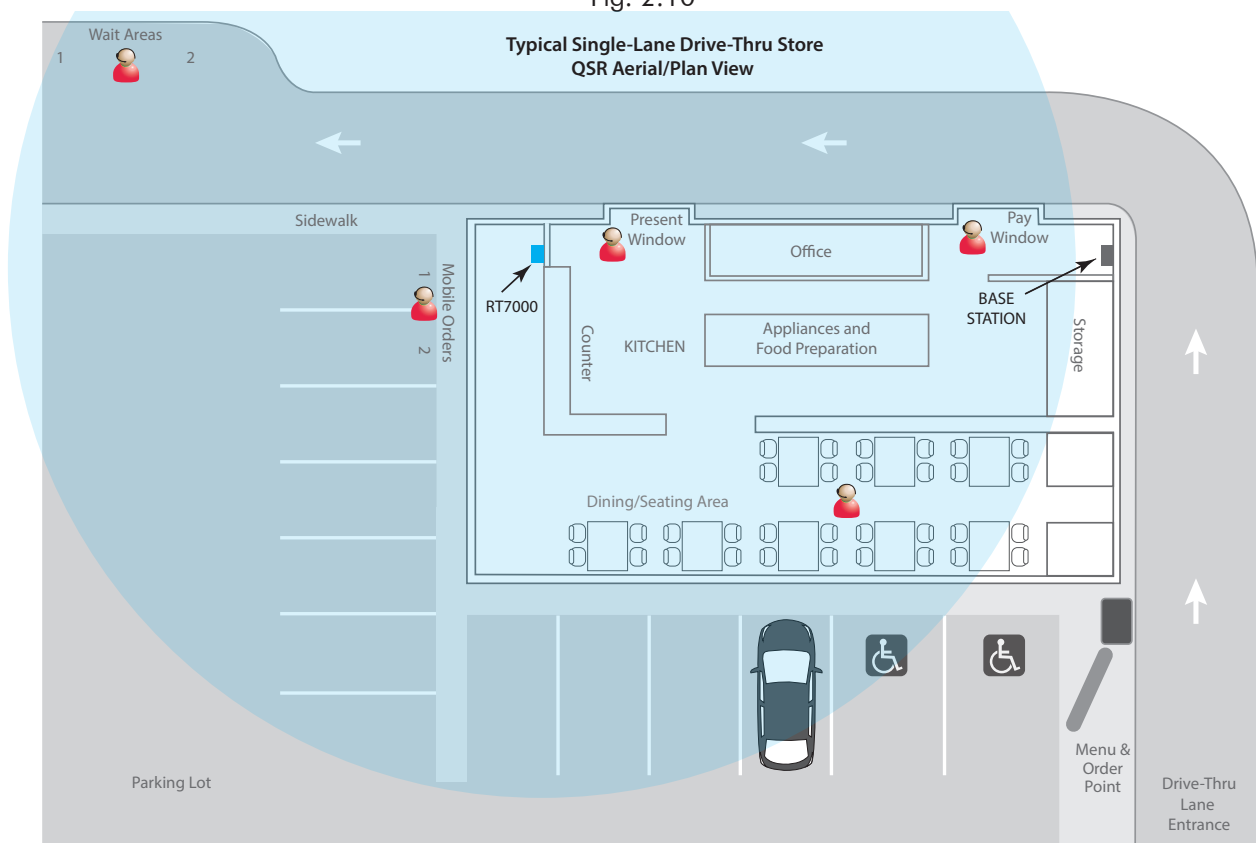# Examples of RT7000 Mounting Locations

Fig. 2.10

= Personnel with headsets

**Typical Single-Lane Drive-Thru Store
QSR Aerial/Plan View**

Fig. 2.11

RT7000 TRANSCEIVER
Front View

This Way Up

HME

To REMOTE
TRANSCEIVER REAR

To NETWORK ROUTER
For CLOUD CONNECTION

To REMOTE
TRANSCEIVER REAR

BASE STATION
POWER SUPPLY

48 V

DC+ GND DC-

Insulate and ground
exposed shield wires

LOOP
CONNECTION

SM7000
SPEAKER/MIC REAR VIEW

HME

NEG - 2
POS - 1

PLC
GND

BK SPKR (+) - 5
BK SPKR (-) - 4
NO - 3
COM - 2
NC - 1

RELAY   BKUP
SPKR

NOTE: Shield
must be
terminated
to GND and
insulated or
sleeved

Remote XCVR 3
Remote XCVR 2
Remote XCVR 1

J3400
J3600
J3800

J1400
J3200

J1
GND
DC-
DC-

J802

J803
J804

J3000

J2003
Serial
Debug

J4501

J800

J201

USB   J7301

J7300   Micro
USB

J200
J600

PCBA

Base Station
opened

Fig. 2.12

Fig. 2.13

INSTALLATION WIZARD OVERVIEW

Once the system is installed and connected, the Base Station turns on automatically when plugged into an electrical outlet. The Installation Wizard is the first screen you'll encounter if the Base Station is new and not yet configured. You will need your installer's password to access the Installation Wizard. The following information gives you an overview of the Installation Wizard but does not show every screen or step involved in completing the installation. The Installation Wizard will guide you through this process.

There are three main setup stages: Welcome, Connect, and Configure. Each stage has several sequential steps (screens), and are completed in order to advance to the next step unless you have the option to "Skip." Completed stages are indicated by a checkmark (e.g., ✓ Welcome in Fig. 3.2). The current stage you are in is indicated in blue (e.g., ① Welcome in Fig. 3.1), while stages yet to be completed are in gray.

STAGE 1: WELCOME

This screen, prompts you as to what is needed before continuing.
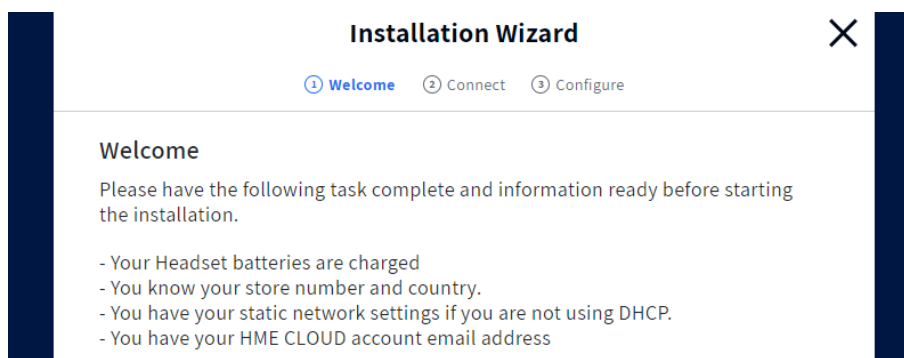
Fig. 3.1

Click the blue Continue button to proceed. This next screen provides you with an overview of the Installation Wizard stages. You have a choice of Manual Setup or Use Wizard. We recommend you use the Wizard.

STAGE 2: CONNECT

This stage connects the system. DHCP stands for Dynamic Host Configuration Protocol and allows a network administrator to supervise and distribute IP addresses from a central point. When the DHCP is enabled, the system automatically populates the required fields. Consult the Glossary if you need a definition of other fields used here.
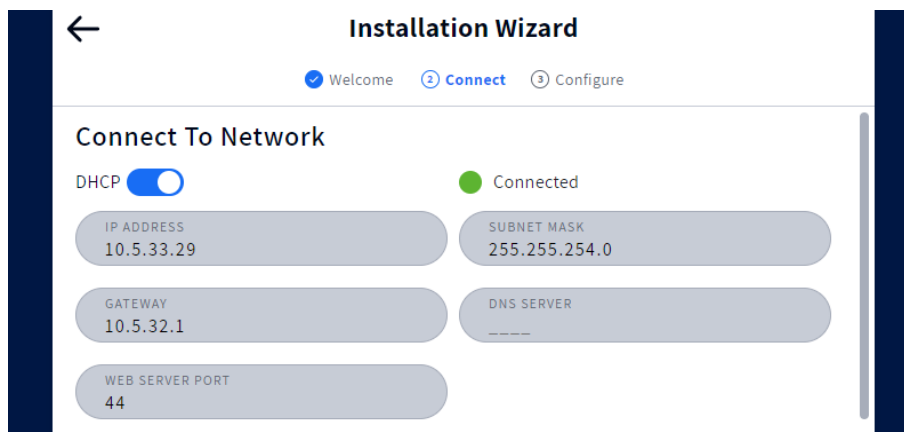
Fig. 3.2

STAGE 3: CONFIGURE

This stage configures the system. Lane setup, Transceiver positioning, and headset registration are performed here.
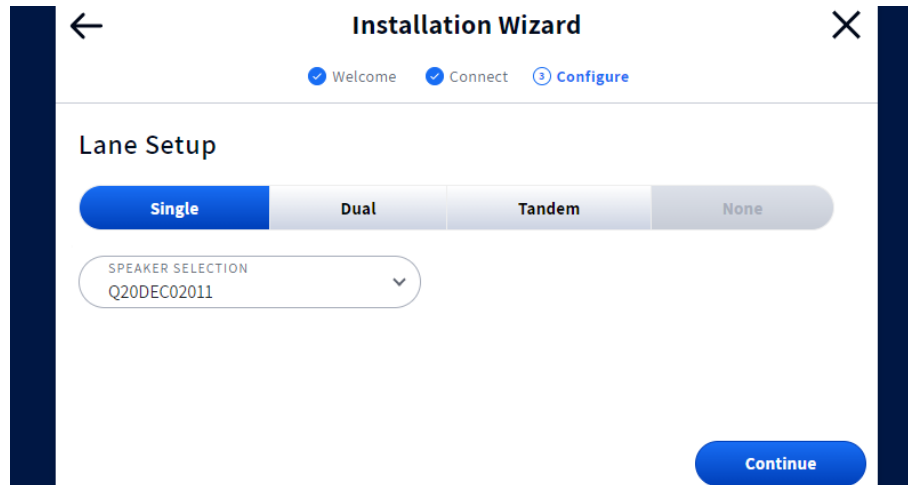

Fig. 3.3

Note: If you accidentally exit the Installation Wizard and need to return to it. LOG IN to the system, go to SYSTEM, then the TROUBLESHOOTING tab and select "Installation Wizard" from the drop-down list. Tap the "Start Installation Wizard" button to begin (see Fig. 3.4).
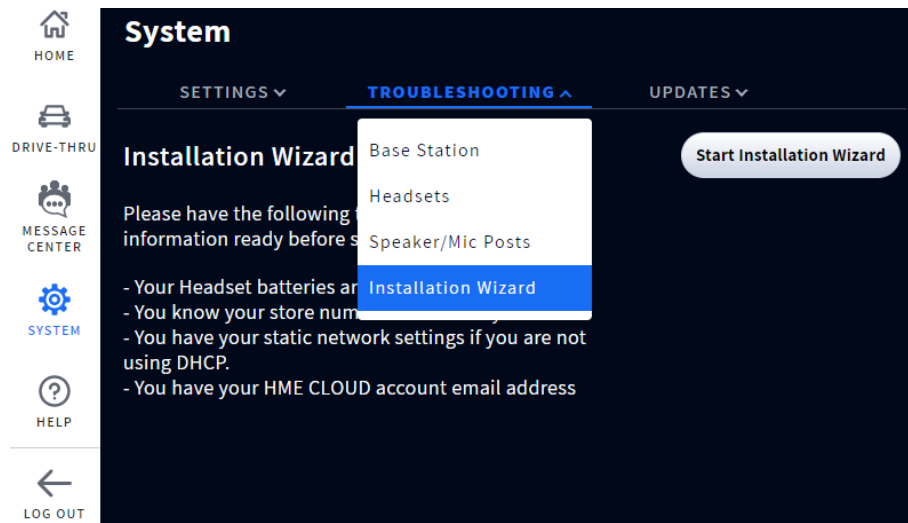

Fig. 3.4

COMPONENT NOTES

CABLE PULLING

This section is only applicable if you are routing new cables and not using the existing cables from a system you are replacing.

> ⚠️ CAUTION: Never run high-voltage cables in the same conduit with audio or loop cables.

1. Run fish tape from inside the building, through the conduit to the speaker post or menu board.
2. Go outside for the cable going to the speaker post. If you are pulling more than one identical cable, mark the cables and spools for identification. Fasten each cable to the fish tape where it comes out of the conduit.
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 in the speaker post or menu board.
5. Cut the cable, leaving about 3 feet (91 cm) of slack (or enough length to easily route the cable through the speaker post and terminate it). If more than one cable has been pulled, mark the ends of the cables again for identification.
6. Remove about 2 inches (5 cm) of the out insulation from the end of each cable. Strip about $^1/2$ inch (12 mm) of insulation from each of the wires in the cable.
7. Route all the cables together to the base station, through walls and over ceiling panels if possible. Make sure that any cable slack is bundled, secured and out of the way if left in the ceiling or elsewhere.

REMOTE TRANSCEIVER (RT7000)

The RT7000 Remote Transceiver (Fig. 4.2) is a required component that facilitates Base Station to Headset communication. It uses a wired connection to the Base Station but is wireless in communicating with Headsets. Up to four RT7000s can be connected to the Base Station to provide greater coverage for larger or multi-level premises.

Installing the Remote Transceiver (RT7000):
• The RT7000 is omnidirectional so mount the RT7000 high in a central location to where the headsets are typically used (see Fig 4.1).
• Maximize line of sight between the transceiver and headsets in an area free from obstructions and equipment/materials that can interfere with signal propagation. These include walls, large metal appliances, hoods, and backsplashes, etc.
• Mount the transceiver vertically on a wall in the upright position (see Fig. 4.4 and orientation arrow on the RT7000 rear). Do **NOT** mount horizontally such as on a ceiling, this will severely reduce the transceiver's range.
• The RT7000 uses an Ethernet (Cat5 or Cat6) cable. Do not exceed 500' (152 m).
• Large premises may require more than one Transceiver. Up to four Transceivers are supported by the

OMNIDIRECTIONAL RANGE

RT7000 REMOTE TRANSCEIVER
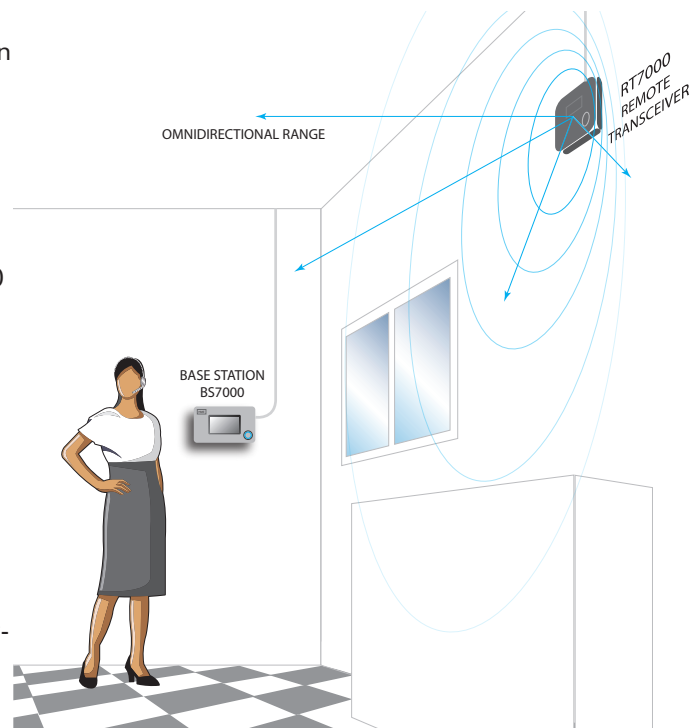
BASE STATION BS7000

Fig. 4.1

Base Station (PCBA ports: J3200, J3400, J3600, and J3800).

- Once connected to the Base Station, the LED in the middle of the circle on the transceiver front illuminates to indicate it is turned on. One of the outer LEDs (numbered 1 to 4) around the circle also turns on (depending on which port the Transceiver is connected to on the Base Station, see Fig. 4.3 and Table 1). This outer LED will initially flash a Magenta, blue or yellow color (see Table 2) as the Transceiver scans for available channels before turning solid green once a channel is found (on the Base Station HOME screen, the Transceivers' indicator is yellow while scanning before turning green).
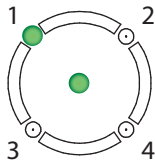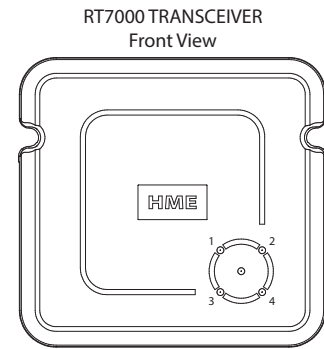
Fig. 4.3

RT7000 TRANSCEIVER
Front View

Fig. 4.2

Remote Transceiver ports on Base Station PCBA			
Connector Label	Status/Description	To	LED #
J3200	Remote XCVR Module 1	First RT7000	1
J3400	Remote XCVR Module 2	Second RT7000	2
J3600	Remote XCVR Module 3	Third RT7000	3
J3800	Remote XCVR Module 4	Fourth RT7000	4

Table 1

* RT7000s can be connected to any port in any order and do not have to follow this table.

| RT7000 LED Colors with Functional Description	
Color (LEDs 1-4)	Functional Description
Green (Solid)	Ready for use. RT7000 is broadcasting, and Headsets can connect.
Magenta (Blinking)	WiFi Scan.
Yellow (Blinking)	Radar Scan.
Yellow (Solid)	RT7000 is in Test Mode.
Blue (Blinking)	Main radio or Radar1 radio is updating.
Cyan (Blinking)	Radar2 radio is updating.
Red (Solid)	RT7000 has reset and is starting initialization.

Table 2
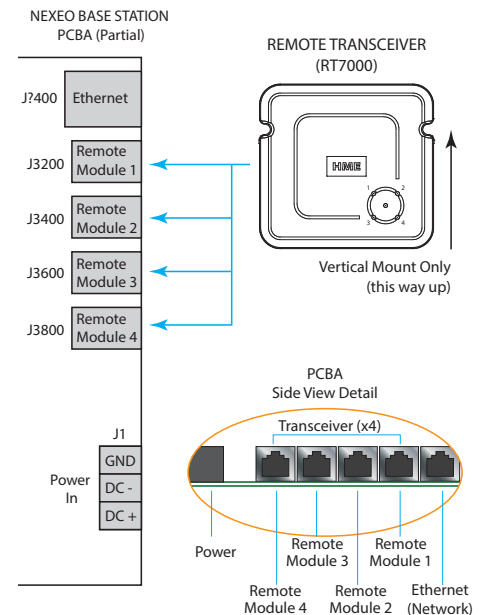
Fig. 4.4

- If the RT7000 is mounted outside on an exterior wall, a surge protector/lightning arrestor must be used, see Fig. 4.5. The ground lug supports up to 12 AWG wire but check with your municipality for local codes on appropriate grounding. With bidirectional protection, either RJ45 jack can be used. Contact HME if one or more are required.
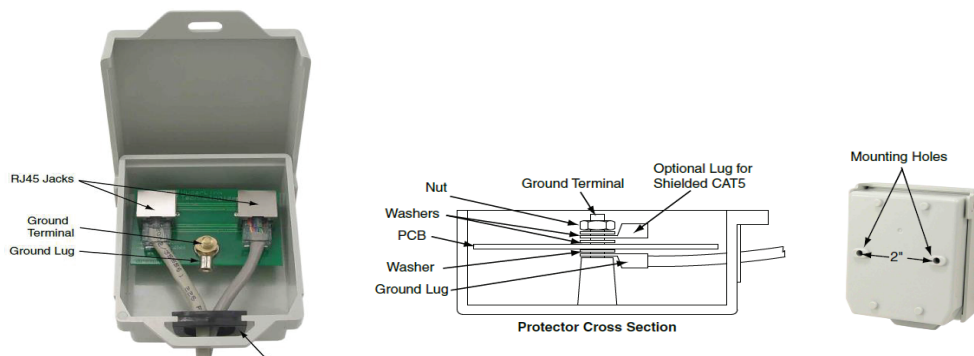
Fig. 4.5

THE SMART BATTERY CHARGER (AC70)

The AC70 Battery Charger can charge up to four BAT70 lithium-ion batteries at the same time. LEDs at the charging ports indicate battery status. Charge time is two hours. The AC70 can be used on a desktop or mounted on a wall.

INSTALLATION/SETUP AND OPERATION

Desktop instructions:
1. Place the AC70 on a level desktop or shelf.
2. Connect the power adapter to a wall outlet, and the other end to the power connector on the AC70 (Fig. 5.1 & 5.2).
3. Position the BAT70 battery correctly for insertion into the AC70 (it is keyed and can only be inserted one way).
4. Insert the BAT70 battery into a vacant port to begin charging. LED activity indicates battery status (see table below).

Charging Ports (x4) on top
Storage Ports (x4) on side

AC70 BATTERY CHARGER Front/Top View   POWER ADAPTER   WALL OUTLET

Note: Only use the HME approved Power Adapter provided.

Fig. 5.1

Battery Charger LED Reference Table		
LED	**Color**	**Status/Description**
	Green	Flashing Green = Charging
		Solid Green = Fully charged
	Red	Flashing Red = Incompatible battery
	Red/Yellow	Flashing Red & Yellow (alternating)= Fault condition

Base Station HOME screen Status Indicators

AC70 BATTERY CHARGER Rear View

Power Connector

Battery Storage Ports (x4)

Mounting Keyholes

Note: Storage Ports do not charge batteries

Fig. 5.2

Note: The AC70 requires close physical proximity (<10 ft (3 m)) to the base station if you desire to monitor battery status via the base station HOME screen. When within range, the Chargers indicator on the HOME screen changes from ⬤ to ⬤ (gray to green). Once green, tap **Chargers** to view battery status, see Fig. 5.3.
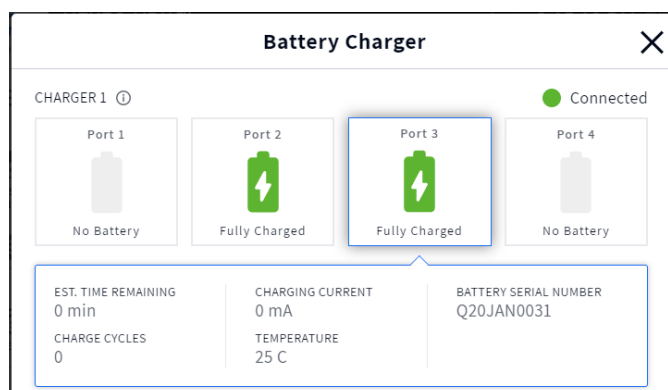
Fig. 5.3

CHANGING POWER SUPPLY ADAPTER

1. Replace power adapter (P/N: CON-00004) to match your country's outlet by using your thumb and forefinger to squeeze in on both sides of the latch (see Fig. 5.4).
2. Continue squeezing latch and slide the adapter out, away from the power supply to remove.
3. Release the latch and slide another adapter on until it bottoms out and the latch clicks to secure it in place.

Press in here on both sides of latch to release

Latch

Adapter

Slide in these directions to remove and replace
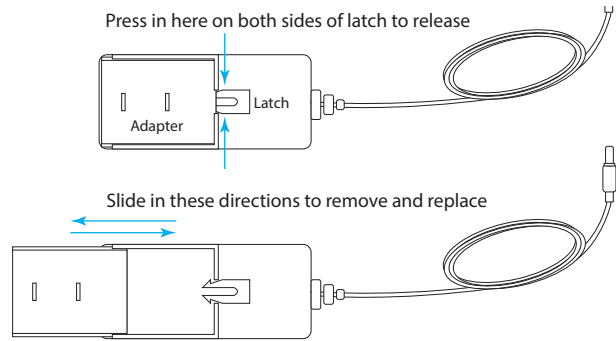
Fig. 5.4

WALL MOUNTING TEMPLATE FOR AC70

1. Hold template against wall.
2. Use a marker to punch through the paper template at the two crosshairs to mark the wall.
3. Drill two holes at the marks on the wall (avoid electrical or plumbing obstructions).
4. Install the provided hardware but do not tighten, leave a gap (~ $1/8^{th}$ inch (3.2 mm)) between the screw heads and wall.
5. Align the AC70 mounting keyholes with the two screws.
6. Mount the AC70 over the screw heads until flush against the wall, then slide it down onto the screw shanks to secure it in place.

2"
(50.8 mm)
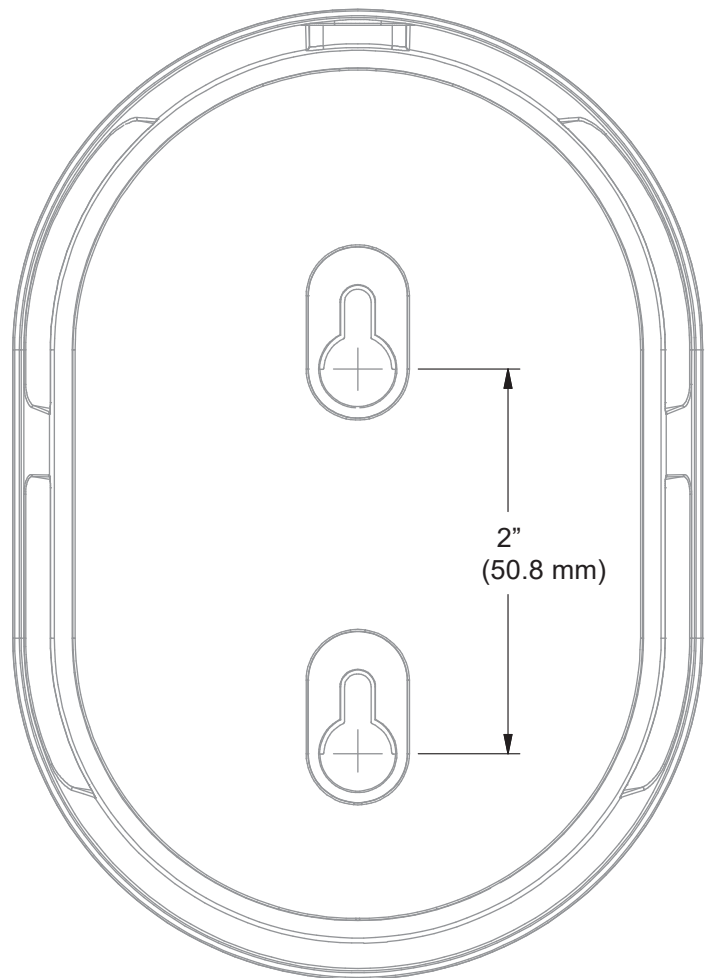
HEADSET (HS7000)

The AIO HS7000 Headset (Fig. 6.1) is an all-in-one headset used to communicate with fellow employees and customers in a drive-thru lane environment. It uses one BAT70 lithium-ion battery. Under normal use, the headset will operate for approximately 8 hours on a single battery charge (new battery) and will alert you when the battery charge is low. The Omni headset (not shown) uses a detached keypad but the functionality is identical to the AIO.
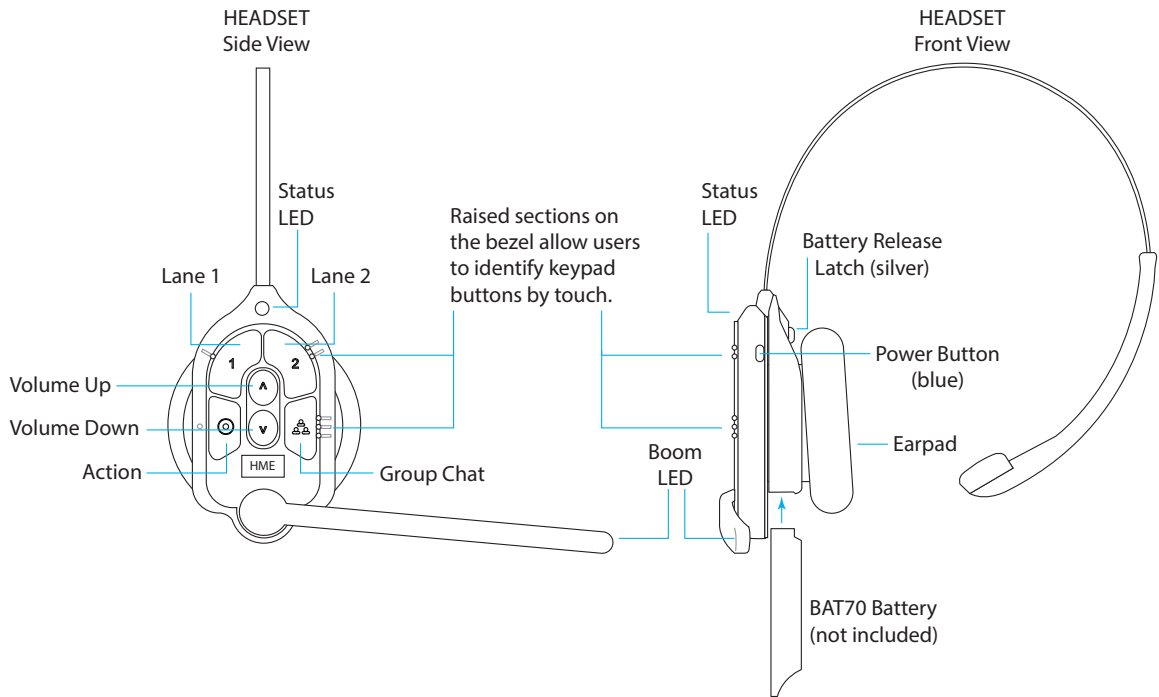
Fig. 6.1

Keypad Reference Table				
Icon	Label	Status LED	Boom LED	Status/Description (voice commands are initiated by saying "Ok Nexeo" first)
1	Lane 1	Green	Green	Tap to talk to lane 1. The Status LED flashes green while the Boom LED turns on solid green. Tap again to stop. The Status LED turns solid; the Boom LED turns off. Voice Command: "lane 1" (to listen only) or "talk to lane 1," or "change lane" if in lane 2
2	Lane 2	Red	Red	Tap to talk to lane 2. The Status LED flashes red while the Boom LED turns on solid red. Tap again to stop. The Status LED turns solid; the Boom LED turns off. Voice Command: "lane 2" (to listen only) or "talk to lane 2," or "change lane" if in lane 1
∧	Volume Up			Tap to increase volume (the headset beeps become louder as confirmation). Press and hold to maximize volume to loudest. Voice Command: "volume up" or "volume #"
∨	Volume Down			Tap to decrease volume (the headset beeps become quieter as confirmation). Press and hold to minimize volume to quietest. Voice Command: "volume down" or "volume #"
👥	Group			Tap for group chat. Both Status and Boom LEDs flash quickly, alternating red & green. Tap again to stop.
◎	Action			No Function. Reserved for future functionality.

Notes: Both the Status and Boom LEDs flash slowly alternating colors when the headset needs to be paired. A yellow Status LED indicates a low battery. The low battery Status LED is also accompanied by audio prompts.

Voice commands can be used instead of tapping the keypad but must first be enabled on the Base Station. To use voice commands, begin by saying "Ok Nexeo," then, once the Boom LED turns on white continue with a voice command (see above table for specifics). Volume # levels are 0-15. (E.g., saying: "Ok Nexeo, volume 12," changes the volume level to 12. Mute is 0).

SETUP AND OPERATION

Note: The HS7000 is wireless and has an optimal range in which signal strength is best. This is dependent on the location of the Remote Transceiver RT7000 and line of sight between both devices.

BASE STATION

1. Insert a fully charged BAT70 battery into the battery holder of the headset (see Fig. 6.1). The battery clicks securely into place.
2. Press the blue power button to turn on the headset (see Fig. 6.1). The status LED turns on green and blinks, alternating between green and red, indicating you now need to pair the headset.
3. Hold the keypad side of the headset against the Headset Pairing Ring (solid blue circle) on the Base Station to pair. Pairing begins automatically as soon as the headset is sensed. The circular blue light turns a swirling green to indicate pairing is in progress (see Fig. 6.2).

Solid Blue: Sensor idle until headset is sensed

Headset Pairing Ring — Swirling Green Pairing in progress

Solid Green: Pairing successful. Begin using headset

Fig. 6.2

4. When the Headset Pairing Ring turns solid green, pairing is successful (registration also happens automatically with the initial pairing). If pairing fails, see note.
5. Select your position and begin using the headset.
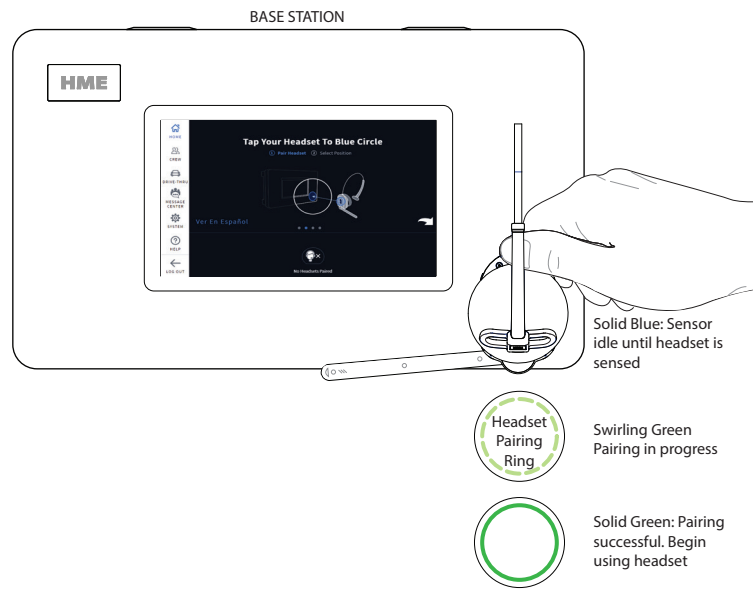
Notes: A swirling red light indicates an unsuccessful pairing. Try again by first verifying that the headset is on, and the battery is fully charged. Hold the headset steadily centered and flush against the Headset Pairing Ring (headset movement and distance from the Pairing Ring can cause pairing errors).

A weak battery might also result in pairing issues. To replace the battery, press the battery release button above the battery compartment (Fig. 6.1) and remove by sliding battery out. Insert a fully charged battery by sliding into the battery compartment until it bottoms out and clicks securely in place.

The SM7000 is a speaker/microphone combination (Fig. 7.1). It is designed for use in Quick Service Restaurant (QSR) menu boards, speaker posts, and enclosures. Also see the NEXEO | HDX system Installation Guide for more details.

Note: When using the SM7000, ignore the section "Installing the Microphone, Speaker and IB7000."

Tools/Equipment Required
- General hand tools: screwdrivers, cutters, pliers, wire strippers, etc.
- Serrated knife
- Audio Cable (not included)
- Acoustic Foam (not included)

Fig. 7.1

These instructions are for a typical installation.
1. Strip approximately 1 inch (25.4 mm) of insulation from the end of the audio cable and ¼ inch (6.35 mm) of insulation from each of the cable wires, but do not tin the wires. Connect the audio cable wires to the connector plug. **Note**: The Shield must also be terminated.
2. Insert the connector plug into the three-pin PLC/BASE speaker connector (see Fig. 7.2).
3. In like manner, terminate the ground loop wires to the two-pin Loop connector.
4. Position the speaker inside the speaker post or menu board, with the gasket centered against the inside of the speaker grill; see Fig. 7.3. Align the opening in the gasket with the grill opening. **Notes**: If more than one location is available, choose the one closest to the driver's window level. The SM7000 should be pushed flush against the post to prevent audio issues. If the speaker post opening is small, position the speaker (lower section of the SM7000) closest to it.
5. Remove both inserts from the molded foam enclosure and place the foam enclosure around the speaker. Trim foam with a serrated knife if necessary. Place removed foam inserts behind speaker to provide pressure to speaker, to ensure a good gasket seal against the speaker grill opening.
6. Connect the other end of the audio cable to the J4500 on the base station. See Fig. 2.12 and "Wiring connections (Not all connections are required)" on page 4.

Fig. 7.2

SPEAKER POST

Foam

Microphone Location

Speaker grill opening

Speaker Location
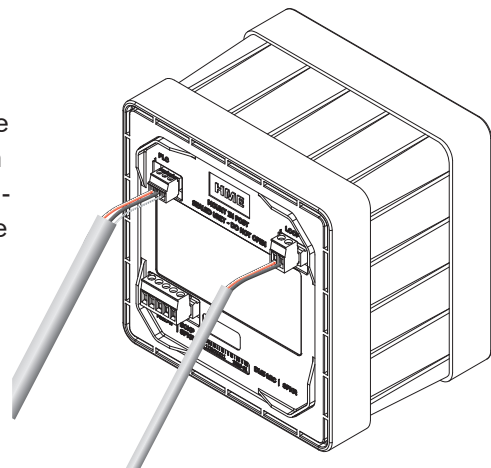
Foam

Foam

Pressure

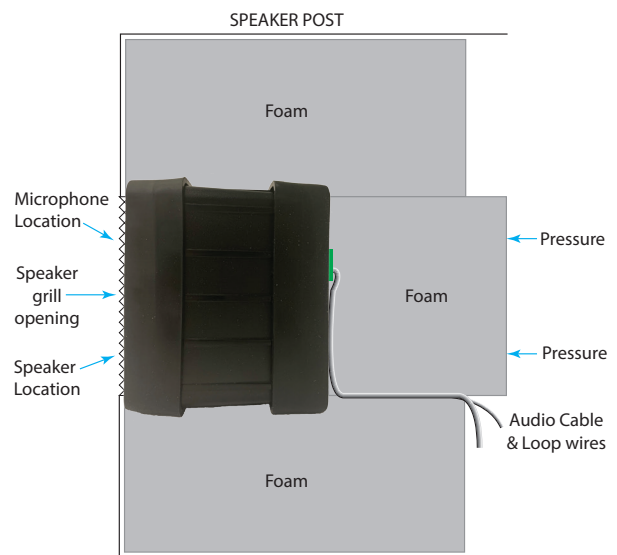Pressure

Audio Cable & Loop wires

Fig. 7.3

Note: The five-pin RELAY | BCKP SPKR connector is optional and is used to connect to an intercom system like the IC300 if a backup is needed.

Note: This section is only necessary if not using the SM7000

THE DM5 MICROPHONE

The DM5 must be used in conjunction with the IB7000 interface box (i.e., the Microphone does not connect directly to the base station).

- See Fig. 2.13 for visual reference and IB7000 section for wiring tables.

Fig. 8.1

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 fill the empty space behind the unit with acoustic foam. 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 or menu board.

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 Fig. 8.2.
3. Insert the DM5 Microphone cable through the hole in the foam enclosure, and place the microphone into the hole as shown in Fig. 8.2.
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 Fig. 8.2.
5. Using a serrated knife, trim the foam enclosure so it is ¼ to ½ inch larger than the upper speaker post compartment (vertically and horizontally) for a compressed fit. Keep the foam pieces to fill the compartment (if needed).
6. Place the foam windscreen in front of the microphone, positioning it to cover the inside of the speaker grill as shown in Fig. 8.3.
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, see Fig. 8.3.
8. The DM5 wires are connected to terminals 1, 2, and 3 of the seven-pin DM5 MIC | SPKR connector on the IB7000. See Fig. 2.13 and "Wiring connections (Not all connections are required)" on page 4.
9. Pack acoustic foam in the empty space behind the DM5 Microphone and its foam enclosure, filling the space.
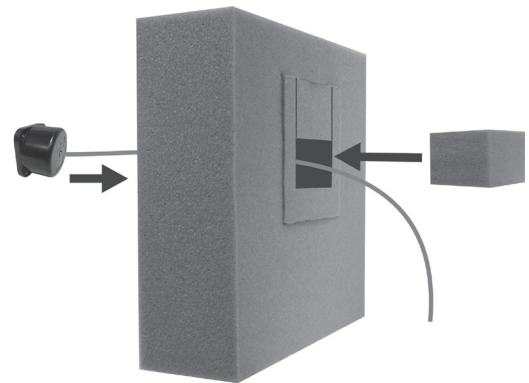

Fig. 8.2

Foam windscreen on front of DM5

Foam piece

Empty space *to be filled with acoustic foam (not provided)*

Grill

DM5 Microphone
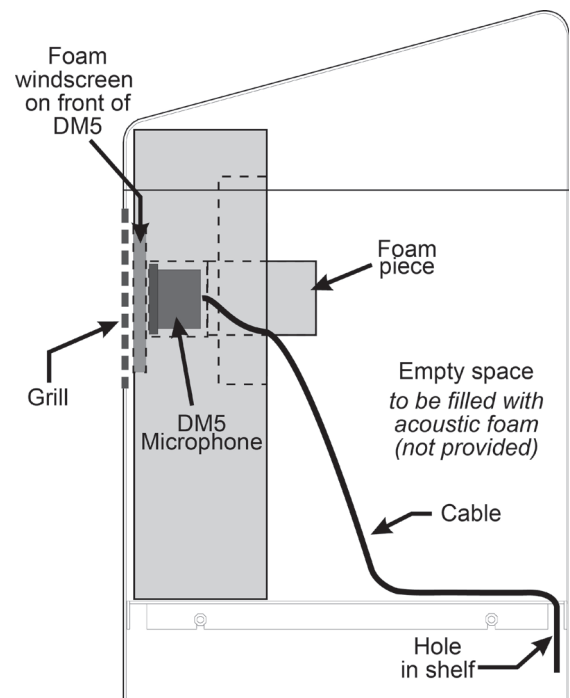
Cable

Hole in shelf

Fig. 8.3

THE SS7000 SPEAKER (IF NOT USING THE SP10)

The SS7000 must be used in conjunction with the IB7000 interface box (i.e., the speaker does not connect directly to the base station).

- See Fig. 2.13 for visual reference and IB7000 section for wiring tables.

These instructions are for a typical installation.

1. Strip approximately 1 inch (25.4 mm) of insulation from the end of the audio cable and ¼ inch (6.35 mm) of insulation from each of the four cable wires, but do not tin the wires. Connect the audio cable wires to the connector plug (the speaker connector is labeled).
2. Insert the connector plug into the speaker connector (see Fig. 9.2).
3. Position the speaker inside the speaker post or menu board, with the gasket centered against the inside of the speaker grill, as shown in Fig. 9.3. Align the opening in the gasket with the grill opening.
4. Remove both inserts from the molded foam enclosure and place the foam enclosure around the speaker. Trim foam with a serrated knife if necessary. Place removed foam inserts behind speaker to provide pressure to speaker, to ensure a good gasket seal against the speaker grill opening.
5. Connect the other end of the audio cable to the IB7000. The four wires on the SS7000 connect to terminals 4,5, 6, and 7 of the seven-pin DM5 MIC | SPKR connector on the IB7000 (this connector is labeled on the IB7000), see Fig. 2.11.
6. Connect audio cable between the three-pin PLC/BASE connector on the IB7000 and J4500 on the base station (this connector is also labeled on the IB7000). See Fig. 2.13 and "Wiring connections (Not all connections are required)" on page 4.
   Note: You may be able to use the existing audio cable if replacing an older HME system like EOS. Verify the cable is in good condition before doing so.

Fig. 9.1
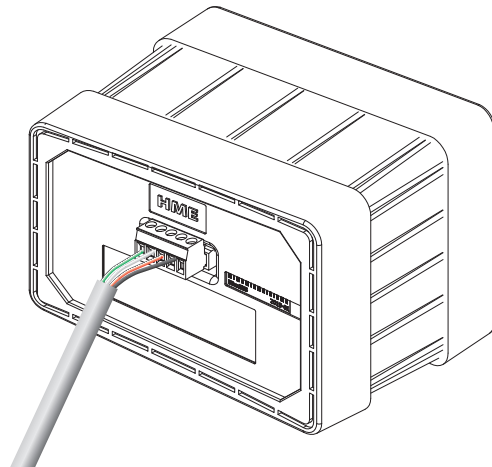
Fig. 9.2
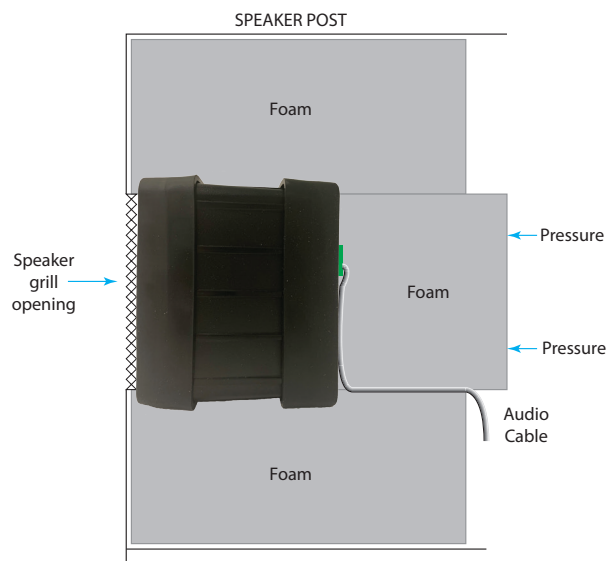
Fig. 9.3

THE SP10 SPEAKER (IF NOT USING THE SS7000)

The SP10 must be used in conjunction with the IB7000 interface box (i.e., the speaker does not connect directly to the base station).

- See Fig. 2.13 for a visual reference and IB7000 section for wiring tables.

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 Fig. 10.2. Insert the connector plug into the connector on the speaker as shown in Fig. 10.2.
2. 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 Fig. 10.2.
3. Position the speaker inside the speaker post or menu board, with the gasket centered against the inside of the speaker grill as shown in Fig. 10.3. The cable connector can be routed to either side. Align the opening in the gasket with the grill opening.
4. 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.
5. The SP10 wires are connected to terminals 6 & 7 of the seven-pin DM5 MIC | SPKR connector on the IB7000 (this connector is labeled on the IB7000).
6. Connect audio cable between the three-pin PLC/BASE connector on the IB7000 and J4500 on the base station (this connector is also labeled on the IB7000). See Fig. 2.13 and "Wiring connections (Not all connections are required)" on page 4. **Note:** You may be able to use the existing audio cable if replacing an older HME system like EOS. Verify the cable is in good condition before doing so.
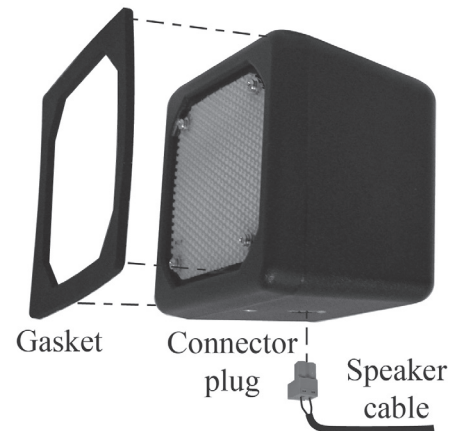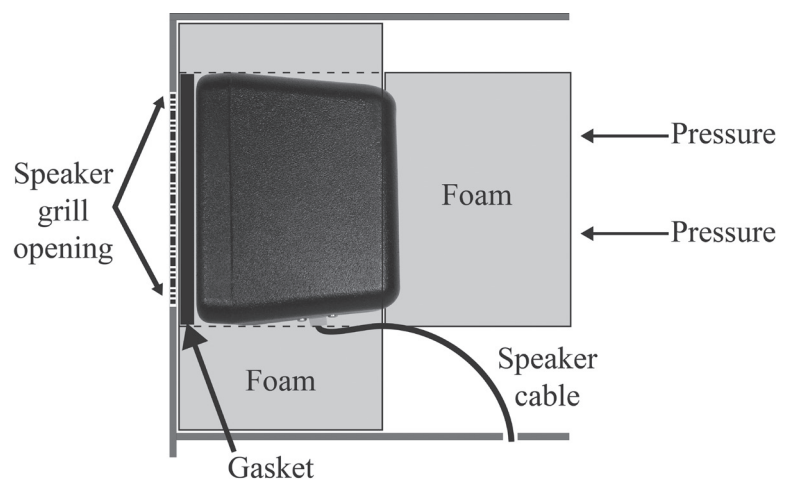

Fig. 10.1

Gasket   Connector plug   Speaker cable

Fig. 10.2

Speaker grill opening

Pressure

Foam

Pressure

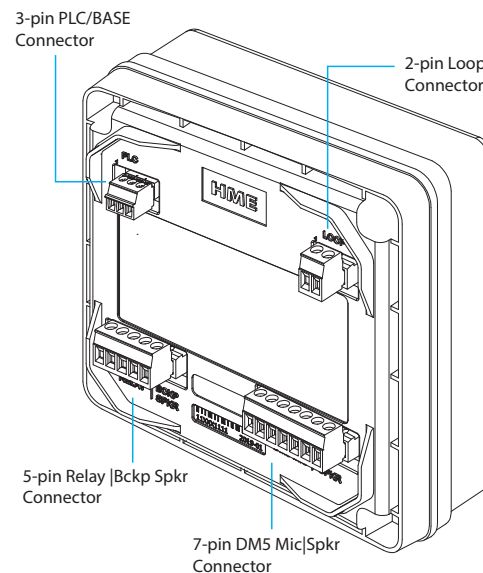Speaker cable

Foam

Gasket

Fig. 10.3

THE IB7000 (REQUIRED FOR DM5 & SS7000 OR SP10. NOT REQUIRED FOR SM7000)

The **IB7000** interface box is required if you are connecting the DM5 and SS7000 speaker or SP10 speaker to the NEXEO system (i.e., these components do not connect directly to the Base Station).

IB7000 Connections:
Fig. 2.13 on page 11 shows how the IB7000 is typically connected. Adhesive strips on housing allow the IB7000 to be affixed to a clean, dry surface inside the speaker post.

Note: **The IB7000 must be mounted vertically, inside the speaker post close to the speaker/microphone**. This will help minimize audio hum and noise (thus, **do not** mount the IB7000 too far away such as inside the store). If more than one IB7000 is being installed, take note of the serial numbers so you know where each is assigned when configuring on the base station.

3-pin PLC/BASE Connector

2-pin Loop Connector

5-pin Relay |Bckp Spkr Connector

7-pin DM5 Mic|Spkr Connector

- The two-pin Loop connector connects to the ground loop.
- The three-pin PLC/BASE connector connects to J4500 on the base station. This connection requires the shield/drain to be grounded; see Table 1.
- The seven-pin DM5 MIC | SPKR connector connects to the Microphone and Speaker; see Table 2.
- The five-pin RELAY | BCKP SPKR connector (optional) connects to an intercom system like the IC300 if a backup is needed in the event of a system failure.

IB7000 PLC connector to Base Station J4500/J4501 (Spkr/Mic Intrfc)			
Pin #	IB7000 PLC Label	Pin #	Base Station J4500/J4501 Label
1	IN1/PL+ (Red wire)	1	Spkr/Mic PL +
2	IN2/PC- (Black wire)	2	Spkr/Mic PL -
3*	GND - (Shield/drain)	3	Shield
		4	Spkr/Mic PL +
		5	Spkr/Mic PL -
		6	Shield

Table 1

| IB7000 DM5 MIC | SPKR connector to Speaker and Mic			
Pin #	IB7000 Label	Description/wire color	Speaker/Mic labels
1	Mic +	Ext. Microphone positive	DM5 +ve (red)
2	Mic -	Ext. Microphone negative	DM5 -ve (black)
3*	GND	Mic Shield (must be terminated)	DM5 Drain/Shield
4**	I.D.	1-WIRE I/F (Red)	Only for SS7000
5**	GND	Ground (Black)	Only for SS7000
6	Spkr -	Speaker negative (White)	SS7000 or SP10 -ve
7	Spkr +	Speaker positive (Green)	SS7000 or SP10 +ve

Table 2

* The Shield/Drain on the DM5 and audio cable from the IB7000 PLC must be grounded.
** Pins 4 and 5 are only used if connecting an SS7000 speaker (not used with SP10).

AOT (AUTOMATED ORDER TAKING)

Automated Order Taking (hereafter AOT) requires a connection with a service provider. Please contact your brand/chain for further information. It's a voice AI feature that uses a bot to take customer orders in the drive-thru so that staff are available to perform other roles in the restaurant. It is disabled by default.
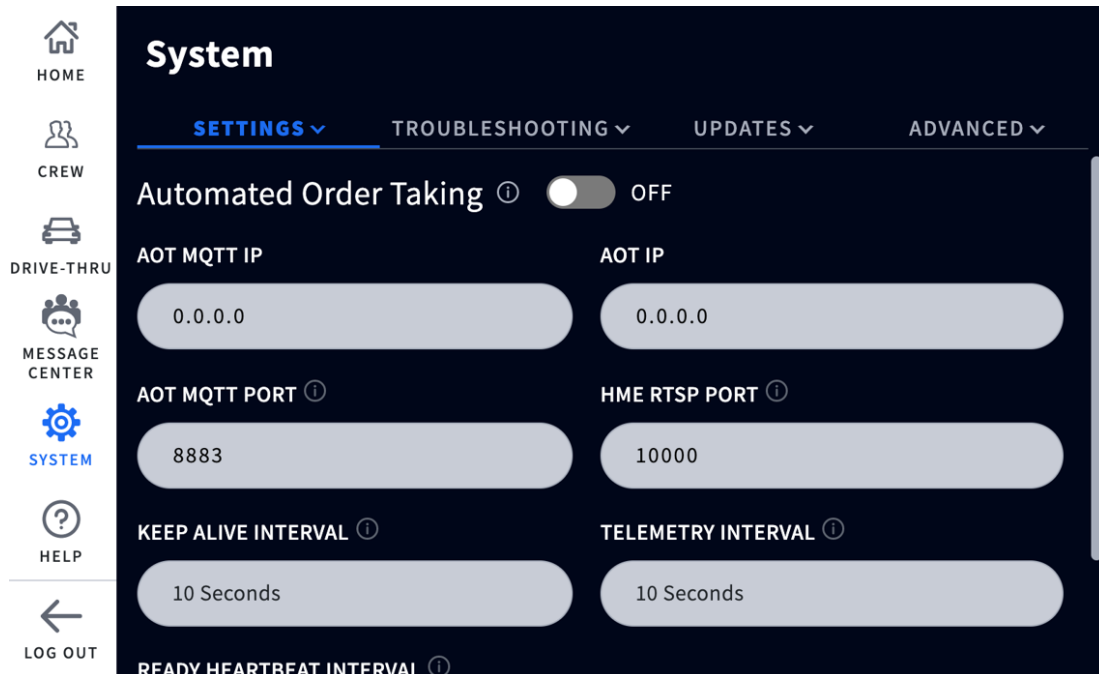
Automated Order Taking: Toggle the OFF switch to ON to enable.

AOT MQTT IP: This is the IP of the MQTT broker. Any valid IP v4 is accepted. The default value is 0.0.0.0.

AOT IP: This setting is for future use and is not required at this time. The default value is 0.0.0.0.

AOT MQTT PORT: This is the port used by the MQTT Broker to listen to client connections. Valid values are 8883 and 1883. The default value is 8883.

HME RTSP PORT: This is the port used by the Streaming Server to listen to streaming client connections. Accepted values are integers between 1024 and 65535. The default value is 10000.

KEEP ALIVE INTERVAL: This is the interval in seconds, used to send keepalive messages to keep the MQTT connection open with the MQTT Broker. A value of 0 will deactivate this mechanism. Values between 0 and 120 are accepted. The default value is 60.

TELEMETRY INTERVAL: This is the interval in seconds, used to send Telemetry messages to the MQTT Broker. A value of 0 disables the Telemetry messages. Values between 0 and 120 are accepted. The default value is 60.

READY HEARTBEAT INTERVAL: This is the interval in seconds, used to send the Heartbeat messages to the MQTT Broker. A value of 0 disables the Heartbeat messages. Values between 0 and 120 are accepted. The default value is 60.

HME Technical Support: If the help provided in this section is not sufficient, please contact our Technical Support team at support@hme.com or call us at 1-800-848-4468. As a valued customer, we are here to help you have the best experience with your product; your success is our success!

TROUBLESHOOTING

Problem	Solution
The Base Station is off (blank screen)	The Base Station does not have a power on/off button, it turns on automatically once it is plugged into a live outlet.
	Verify the power adapter is plugged into a live wall outlet.
	Verify the power cable is properly terminated to J1 on the Base Station PCBA and that there is power from the power adapter to this end of the cable (illuminated LEDs on the PCBA indicate there is power to the base station).
The Base Station is on but not responsive to certain actions	Log in to the base station, go to SYSTEM, click on the troubleshooting tab, select from the menu and try restarting the component that is not responsive. Restarts can take several minutes to complete.
The entire HOME screen is not responsive to touch	Try a hard reset by unplugging the power cord from the wall outlet. Wait a few seconds and then reconnect power. Reboots can take several minutes to complete.
The headset does not power on	Verify the BAT70 battery is fully charged and not dead (verify charge in AC70).
	Verify the BAT70 battery is inserted correctly and properly docked (you should hear an audible click when it is properly inserted and securely seated).
	Verify the Power button depresses when pressed.
	Verify the battery contacts in headset battery holder and on the battery are clean and free of debris.
	Verify the battery is the correct type (only HME BAT70 batteries are valid, the battery is labeled on the back),
The headset does not pair	Verify the headset has a sufficiently charged battery and that the headset is powered on (the headset status LED illuminates).
	Hold the headset steady, centered, flush against the headset pairing ring. Movement and proximity can cause pairing failures.
The headset has no sound	Verify the headset is on.
	Verify the headset is paired.
	Verify the headset is within range of the transceiver.
	Press and hold the volume up button on the headset keypad, an audible beep gets louder as volume increases.
Headset communication is choppy or drops off	Headsets have an effective range based on the location of the RT7000 transceiver. Move the headset to within range of the transceiver.
	Large objects can also interrupt signal propagation. Try moving to a different location.
	Verify the headset has a charged battery.

Problem	Solution
Headset battery will not charge	Verify the charger is plugged in and on.
	Verify the battery is the correct type (BAT70).
	Verify the battery is docked correctly in the port (the battery is keyed so it can only be inserted one way. It should not be forced into the charging port).
	Verify the battery and charger contacts are clean and free from debris, contaminants, or obstructions.
	Verify battery is not dead. Batteries have lifespan, they will eventually die and will need to be replaced. The Base Station monitors battery charge cycles and informs you when to replace a battery. The AC70 needs to be within 10' (3 m) of the Base Station to monitor battery status.
RT7000 Transceiver not working	Verify that the Ethernet cable is good, and connected on both ends. The RT7000 Power LED illuminates when the Base Station is on.
	When disconnecting the RT7000 from a Base Station that is powered on, you must wait at least 30 seconds before reconnecting the RT7000 Ethernet cable. This allows the system time to sense the disconnection and turn power to the port off. Reconnecting to a live port can damage the circuitry. If a port is damaged, try connecting to another one.

AOT TROUBLESHOOTING

Problem	Solution
Audio streaming is not flowing between NEXEO and the QSR Audio Service	• Verify that IB7000/SM7000 version is 2.11.4 or higher and they are connected to the base.
	• Verify in AOT Settings screen that Automated Order Taking is enabled, MQTT IP and PORT are set correctly, and RTSP Port is configured using the value used by the QSR Audio Service to connect to the Streaming Server.
	• Download AOT logs and verify that MQTT is sending messages correctly (Heartbeat, Telemetry, Arrivals, etc). Then validate that the StreamingServer is up and running and that streaming client's connection is established.
	• Re-start the NEXEO base if MQTT or Streaming Server are not responding (not logging any information).
Audio streaming is not flowing between QSR Audio Service and NEXEO	• Verify in AOT Settings screen that Automated Order Taking is enabled, and RTSP Port is configured using the value used by the QSR Audio Service to connect to the Streaming Server.
	• Validate that the IB7000/SM7000 is connected to the base.
	• Validate that there is not headset connected to that lane with the microphone open.
	• Download AOT logs and verify that the StreamingServer is up and running and that streaming client's connection is established.
	• Re-start the NEXEO base if Streaming Server is not responding (not logging any information)

Problem	Solution
Escalation tones are not playing	• Verify that there is a car present on the lane where the escalation should be played. • Verify that the escalation messages are present on the base, going to the Message Center, and validating that the 4 AOT Escalation messages are available. • Verify that the audio files associated with the escalation messages are also present on the base, going to the Message Center -> Audio Files tab, and validating that the 2 AOTEscalation files are there. • Download AOT logs and verify that the MQTT escalation message has been received on topic aot/request/auto-escalation/lane1 or aot/request/auto-escalation/lane2.
MQTT Telemetry and Ready messages are not being sent, while other messages are	• Download AOT logs and verify that the StreamingServer is up and running. • Send a re-start command via MQTT message from the QSR MQTT services. • Re-start the NEXEO base if Streaming Server is not responding (not logging any information).

LEDs

The System uses LEDs on components to indicate the status of the device.

LED	Description
AC70 Charger: RED LED ☀	A ☀ (flashing red) LED indicates an unauthorized or unrecognized battery. **Only HME approved (p/n BAT70) lithium-ion batteries can be used with your system**. ⚠ **Caution:** Batteries not approved by HME will not charge properly and can cause damage to the system, including explosions with the potential to shock, inflict personal injury and/or start fires. 🗑 HME cares about the environment. Please check with your municipal laws, regulations, and guidelines for the proper disposal of dead lithium-ion batteries.
AC70 Charger: RED/YELLOW LED ☀☀	Flashing Red & Yellow (alternating)= Fault condition other than an unrecognized.

If you cannot resolve problems with the information presented here, please contact HME Technical Support at 1-800-848-4468.

ADDITIONAL TROUBLESHOOTING

If your system malfunctions, a red indicator on the HOME screen will alert you to where the problem is (see color-code definitions below). Then, try resetting the system component in question via the Base Station. For example, if the problem is the Speaker/Mic Posts:

1. Select SYSTEM from the sidebar menu.
2. Log in to the system.
3. Select the TROUBLESHOOTING tab.
4. Choose Speaker/Mic Posts from the drop-down list.
5. Tap on the Restart Speaker/Mic Post button and follow the prompt to reset.

Or, try reseting the system:
1. Select SYSTEM from the sidebar menu.
2. Log in to the system.
3. Select the TROUBLESHOOTING tab.
4. Choose Base Station from the drop-down list.
5. Tap on the Restart Base Station button and follow the prompt to reset.

Electrical Power Outage: If your system fails to function properly after an electrical power outage, power the system off and unplug the AC power adapters from their electrical outlets. Wait a few seconds, then plug them back in and power the system back on.
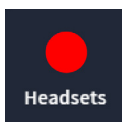
A red indicator like this one doesn't always indicate a failure. It may indicates that the feature/component is offline, inactive or possibly something else requiring corrective action. In this example there are no headsets detected, a headset needs to be turned on and paired for this marker to turn green. Tapping on the indicator will also reveal more details.
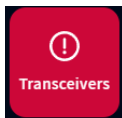
A red indicator like this one indicates a critical system failure, and requires immediate attention. In this example the Transceiver has failed, which might be caused by a disconnected or failed Ethernet cable or a loss of power. The system cannot function in this condition until the failure is resolved.

A yellow indicator indicates an intermediate or transitional state such as scanning or an alert. When the Base Station is turned on, reset, or receives an upgrade, the transceiver indicator initially turns yellow as it scans the area for available channels before turning green. This can take a few minutes.
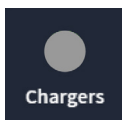
A gray indicator like this one indicates that no AC70 Smart Battery Charger is sensed. Plug in the AC70 and position it within 10 feet (3 m) of the Base Station for it to turn green. Note: this marker is not red because the AC70 can function independently and does not require a Base Station connection to be functional.
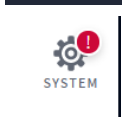
A red exclamation mark like this indicates a new firmware update is available.

> (i) Visit System > Settings > Lane Setup to assign Speaker/Mic posts to lanes.

A red banner like this is a prompt requiring attention. This banner contains the path to the item requiring attention. In this example you are asked to go to Settings tab of the SYSTEM screen. "Lane Settings" is found in the Settings drop-down list. Once there you will notice that the Speaker Selection field prompts you to "Select One." For a single-lane, there is only one entry to chose from, so select this entry. The Save button appears, click Save and the speaker/Mic post is now assigned to the lane. The red banner on the Home page disappears.

FIRMWARE UPDATES

Red Exclamation Marks like the one next to the SYSTEM icon in Fig. 5.2 indicates at a feature or component requires attention. This happens when there is a firmware update for one or more components. Follow this red exclamation mark to it's source to see what action is required. In this example, Fig. 5.3 is prompting you to proceed to the SYSTEM screen.
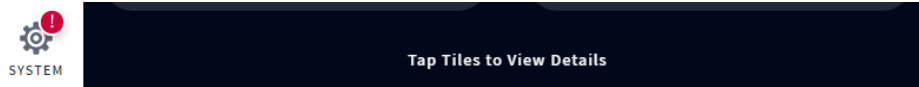
Fig. 5.2

Log in to proceed to the SYSTEM screen. The Red Exclamation Mark is now also visible next to the UPDATES tab. Tap on the UPDATE tab, in this example, the Base Station option requires attention, see Fig. 5.3.
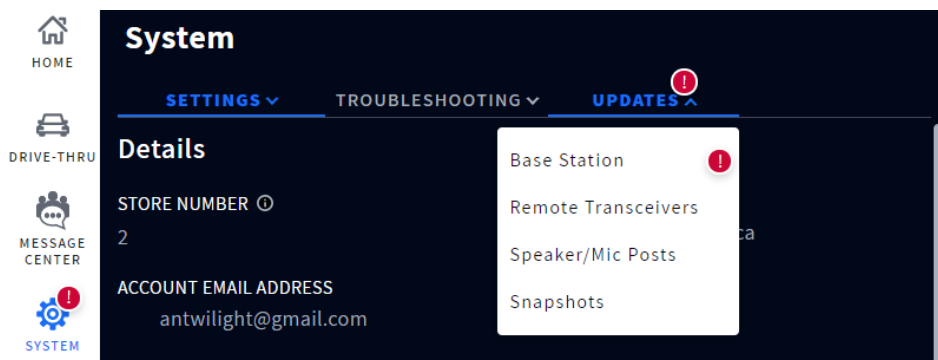

Fig. 5.3

Select Base Station from the drop-down menu and tap the blue Update button that appears to update the firmware. Once the update is completed, the red exclamation mark disappears (updates can take several minutes to load).

Attenuation: Attenuation is a telecommunications term that refers to a reduction in signal strength commonly occurring while transmitting analog or digital signals over long distances. Attenuation is historically measured in dB, but it can also be measured in terms of voltage.

Base Station: This is the central control unit for your system. The Base Station interfaces with all system components, including the Cloud. System features are configured and controlled here; headsets are also paired here.

ClearSound: This is a patented digital processing technology used to remove background noise from audio transmissions.

CSV: Comma-Separated Value, is a file containing values separated by a delimiter, and formatted as a database table.

DHCP: Dynamic Host Configuration Protocol is a network management protocol used on UDP/IP networks. A DHCP server dynamically assigns an IP address and other configuration parameters to each device on a network so they can communicate with other IP networks.

Dropout: This is the term used when a vehicle is present at a detection point but not detected by the system.

DNS Server: Domain Name Server is a directory of domain names with translated IP addresses.

Gateway: A device (usually a router) that connects one or more computers on a network to other networks.

Ghost Car/Vehicle: This is the term used when there are detection anomalies that occur when a vehicle is detected at one detection point but not detected at another. There are a few reasons why this can occur; for example, a vehicle drives over a detection point and then leaves the lane before reaching the next detection point or vice versa. Another example is if vehicles are too close together but are detected as one vehicle. Or, if a vehicle moves too quickly across one of several detection points to be detected.

Headset: This is the device worn by your crew/staff and used for 2-way communication between employees and customers. It consists of an earpiece with keypad and a boom microphone. The system uses two headset models:
- **AIO (All-In-One):** This headset is used by the drive-thru crew and can communicate with customers at the drive-thru menu and speaker post.
- **Omni:** This headset model uses a separate keypad (not connected to the headset like the AIO) but otherwise has the same functionality.

HME CLOUD: This is a remote server used by your system. It allows your system to access and store data via the internet. It also provides access to other systems in your network connected to the HME CLOUD.

IP Address: Internet Protocol Address. A unique computer address that some electronic devices (such as computers or routers) use to identify and communicate with each other on a network.

NTP: Network Time Protocol is a networking protocol for clock synchronization between computer systems and is intended to synchronize all participating systems to within a few milliseconds of local standard time or Coordinated Universal Time (UTC)

Pairing: This is an initiation process required to establish a wireless connection between two or more devices allowing them to find, recognize and communicate with each other. It pairs a device to the system's control unit; headsets for example must be paired with the Base Station before they can be used. They need to be paired every time they are put back into service if they have been logged out of the system when not in use.

Registration: This is a one-time function that registers a new device with an existing system. Headsets when used

for the first time are registered at the base station. This happens automatically with the initial pairing. Once registered the headset becomes a part of the system even though they still need to be paired with each use.

Radio/Remote Transceiver: Sometimes referred to as RFP (Radio Fixed Part) is the combined radio/antenna system that facilitates wireless communication between headsets and the base station. At least one is required per store but up to four can be installed as range extenders for larger premises. A radio transceiver can accommodate ten chat channels and ten private communication channels.

Run-on: This is the term used for a vehicle that has departed from a detection point but is still sensed as being present.

Speaker: These are speakers in addition to the headset speakers, providing another source of audio for inside or outside the store. Speakers are installed externally at menu boards to communicate with customers and can also be installed inside the store enabling a manager to address employees such as those without headsets.

Subnet Mask: Splits the network into a series of subgroups or subnets to speed up the delivery of data by the routers.

Tooltip: This is a pop-up tip box dialog that provides information or help for a feature, term, link, button or icon. Hovering over or tapping on an element that has a tooltip associated with it, triggers the tooltip to appear. The tooltip caret points to or is centered on the element that triggered it.

Web Server Port: This is the unique network port number used by NEXEO to communicate over the network it is connected to.

AOT GLOSSARY OF TERMS

ASR: This refers to the process of automatic speech recognition, often used to transform speech to text (STT) for further analysis and interpretation.

BOT Escalation: When the BOT is not able to understand the intention of the QSR customer or the language spoken by them is not supported, it sends and escalation request, to indicate the crew members that assistance is needed.

Crew-Takeover: When a crew member taps 1 or 2 on their headset keypad, a crew takeover signal is sent to the BOT to indicate that the order will be taken by the restaurant crew member.

MQTT: This is a lightweight transport (over TCP/IP) protocol that uses the publish/subscribe messaging pattern, ideal for Internet of Things (IoT) solutions.

RTSP: The Real Time Streaming Protocol is a network control protocol designed for use in entertainment and communications systems to control streaming media servers.

Streaming Server: This is a component that runs inside the NEXEO base as a service, and it mainly listen to connections from clients on a specific port (RTSP Port), has the capability to send and receive audio streams, and provides the ability to control the media transmissions via commands.

TTS: This refers to the process of transforming text to speech (TTS), used to produce audio from a text script.

SPECIFICATIONS

BS7000	
Dimensions	7.62" x 12.579" x 3.669" (193.55 x 319.51 x 93.19 mm)
Weight	3.5 lb (1.59 kg)
Power Supply	Input Voltage: 100 - 240 VAC nominal
	Output Voltage: 48 VDC
	Current: 1.88 A Power: 90 W
LAN	Gbit Ethernet
Front Panel	LCD type: 800x480 TFT w/ capacitive touch
Rear Panel	RJ45 (x5), USB type C, USB type A, PCBA mounted power supply & component headers
Temperature	Operating Temperature range: 0°C (+32°F) to +50°C (+122°F).
Compliance	See NEXEO	HDX - Regulatory, Compliance, and Safety Guide online

HS7000	All in One (AIO) Headset
Dimensions	5.2" x 5.2" x 2.1" (132.1 x 132.1 x 53.3 mm) with boom excluded
	9.2" x 5.2" x 2.1" (234.4 x 132.1 x 53.3 mm) with boom extended down
Weight	3.67 oz (104.04 g) with battery included
Power Supply	Voltage: 3.7 VDC, powered from a rechargeable Lithium-ion battery
Frequency Range	Audio: 100 Hz to 7.48 kHz
Wireless	Main Radio: 5.180 GHz – 5.8525 GHz
	Secondary Radio: 2.402 GHz - 2.480 GHz
Power, Watts	Nominal Power with listening only: 0.314 W
	Maximum Power with dedicated mode: 0.407 W
Keypad type	Touch Sense
Temperature	Operating Temperature range: 0°C (32°F) to +50°C (+122°F)
	Storage Temperature range: -10°C (14°F) to +80°C (+176°F)
Compliance	See NEXEO	HDX - Regulatory, Compliance, and Safety Guide online

AC70	
Dimensions	5.09" L x 3.64" W x 1.84" H (129.2 x 92.4 x 46.7 mm)
Weight	5.97 oz (169.19 g)
Power Supply	Input Voltage: 100 - 240 VAC nominal
	Output Voltage: 5 V; 4 A
	MTBF (min.): 300,000 hours demonstrated
	Charge Output: ~ 3 W per port
Wireless	Wireless PAN, 2.4 GHz Wireless Technology
Front Panel	Four charging ports for BAT70
	LED type: 4 x RGB, for port/battery charging status
Side Panel	Four storage ports for BAT70 (Storage ports do not charge)
Temperature	Operating Temperature range: 32°F - +104°F (0°C - +40°C)
	Storage: -40°F to +176°F (-40°C to +80°C) Humidity: 0 - 95%, non-condensing

AC70	
Compliance	See NEXEO | HDX - Regulatory, Compliance, and Safety Guide online

RT7000	
Dimensions	6.705" x 7.157" x 1.56" (170.31 x 181.79 x 39.62 mm)
Weight	13.95 oz (395.6 g)
Power Supply	Voltage: 48 VDC (powered from BS7000).
	Current: 60 mA pk-pk @ 48 V
LAN	Ethernet wired connection to Base Station - AES/EBU interface
Frequency Range	Main Radio: 5.180 GHz – 5.8525 GHz
	Secondary Radio: 2.402 GHz - 2.480 GHz
Power	2.88 W
Front Panel	LED type: 5 x RGB, one for power and 4 for port indication
Rear Panel	RJ45 port
Temperature	Operating Temperature range: -25°C (-13°F) to +60°C (+140°F).
Compliance	See NEXEO | HDX - Regulatory, Compliance, and Safety Guide online

SM7000	
Dimensions	5.68" x 5.68" x 4.55" (144.27 x 144.27 x 115.57 mm)
Weight	2.1 lb (952.54 g)
Power Supply	Voltage: 48 VDC (powered from BS7000)
	Current: 0.339 A (max start up)
Frequency Range	Audio: 100 Hz to 7.4 kHz
	Powerline network over 48 VDC: 2 MHz – 67.5 MHz
Power	Nominal power with no audio: 5.2 W
	Maximum power at maximum volume: 22 W
Front Panel	Speaker type: 3", 8 ohm, wideband type.
	Microphone type: Wide dynamic range digital
Rear Panel	Phoenix connector type headers
Wireless	N/A
Temperature	Operating Temperature range: -25°C (-13°F) to +60°C (+140°F)
Compliance	See NEXEO | HDX - Regulatory, Compliance, and Safety Guide online

IB7000	
Dimensions	5.68" x 5.68" x 2.05" (144.27 x 144.27 x 52.07 mm)
Weight	14.4 oz (408.23 g)
Power Supply	Voltage: 48 VDC (powered from BS7000)
	Current: 0.331 A (max start up)
Frequency Range	Audio: 100 Hz to 7.4 kHz
	Powerline network over 48 VDC: 2 MHz – 67.5 MHz
Power	Nominal power with no audio: 5.2 W
	Maximum power at maximum volume: 22 W

IB7000	
Front Panel	Two adhesive strips for mounting to a vertical surface
Rear Panel	Phoenix connector type headers (includes speaker output and analog DM5 micro- phone input)
Wireless	N/A
Temperature	Operating Temperature range: -25°C (-13°F) to +60°C (+140°F)
Compliance	See NEXEO	HDX - Regulatory, Compliance, and Safety Guide online

SS7000	
Dimensions	5.76" x 3.92" x 3.44" (146.3mm x 99.6mm x 87.4mm)
Weight	1.14 lb (492.6g)
Power Supply	Voltage: 48 VDC, powered from BS7000
Frequency Range	Audio: 100 Hz to 7.4 kHz
Power	15 watts, 8 ohm
Rear Panel	Phoenix connector type headers
Wireless	N/A
Temperature	Operating Temperature range: -25°C (-13°F) to +60°C (+140°F)
Compliance	See NEXEO	HDX - Regulatory, Compliance, and Safety Guide online

SP10	Speaker
Dimensions	5.62" H x 5.62" W x 4.5" D (142.8 x 142.8 x 114.3 mm)
Dimensions with foam gasket	5.62" H x 5.62" W x 4.75" D (142.8 x 142.8 x 120.6 mm)
Weight	2.55 lb (1.16 kg)
Power	15 W
Impedance	8 Ω
Temperature	Operating Temperature range: -22°F to +140°F (-30°C to +60°C)

DM5	Microphone
Dimensions	2.81" H x 2.81" W x 1.78" D (71.5 x 71.5 x 45.1 mm)
Weight	4.37 oz (123.9 g)
Microphone Type	Electronic
Impedance	200 Ω
Temperature	Operating Temperature range: -22°F to +140°F (-30°C to +60°C)

NOTES

A copy of this guide and much more including Regulatory, Compliance,
and Safety information can be found by scanning this QR code or going to:
https://www.hme.com/qsr/drive-thru-user-manuals/