EOS|HD®

Wireless Drive-Thru Headset System with HD Audio

Installation Wiring Diagrams

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For additional installation information on this system, please consult the manual:
"EOS|HD Wireless Drive-Thru Headset System with HD Audio - Installation Instructions",
located on our website at https://www.hme.com/qsr/drive-thru-user-manuals/

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Illustrations in this publication are approximate representations of the actual equipment,
and may not be exactly as the equipment appears.
Wiring diagrams, Drive-Thru System with VDB

Full-Duplex, but no Switcher Board (Lane 1 or Single Lane connections)

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

For Lane 2 of a Dual-Lane drive-thru, refer to the wiring diagram on the next page.
Full-Duplex, but no Switcher Board (Lane 2 connections)

This wiring diagram only shows Lane 2 connections for a Dual-Lane drive-thru.

For Lane 1 of a Dual-Lane drive-thru, or Single-Lane drive-thru connections, refer to the wiring diagram on the previous page.
Full-Duplex, Switcher Board and IC300 (Lane 1 or Single Lane connections)

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

For Lane 2 of a Dual-Lane drive-thru, refer to the wiring diagram on the next page.
**Full-Duplex, Switcher Board and IC300 (Lane 2 connections)**

**Outside Speaker**
- Power connection only - White
- Microphone connections
  - Black: to J1, 1 & 2
  - Red: to J1, 1

**Microphone**
- Important: Microphone and speaker must use separate cables
- Power connection only - White
- Microphone connections
  - Black: to J1, 1 & 2
  - Red: to J1, 1

**Timer System**
- Positive Vehicle Detect Signal (+11V Minimum)
  - Ground: to J3, 8 & 9
- Negative Vehicle Detect Signal
  - Ground: to J3, 7 & 8
  - Greentop: to J3, 6 & 10

**NOTE:** If using the Internal Message Repeater, do not use J3 pins 6 & 7 for Ground. See Timer System Alternate Wiring at far right.

**External Detector**
- Negative Vehicle Detect Signal
  - Ground: to J3, 5 & 6
- Positive Vehicle Detect Signal (+11V Minimum)
  - Ground: to J3, 4 & 5
  - Greentop: to J3, 3 & 4

**IC300 Intercom**
- Ground: Black/Yellow to J4, 4
- Speaker/Microphone: Green to J4, 7
- Speaker/Microphone: Red/Green to J4, 5 & 6

**NOTE:** IC300, IC300 Speaker/Microphone switch #1 & 2 must be set to OFF, and 3 & 4 must be set to ON.

**24V DC Power Adapter**
- to J3 DC+ DC- & GND

**NOTE:** If using an existing 115VAC power adapter, use only J3, 1 & 2 for AC+ & AC-.

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In this configuration, the 51 switch must be OUT.

The S2 switch must be IN only when a wired backup system is being used, OUT all other times.

**Underground Loop**
- Timer System
  - Alternate Greet Wiring
    - System 30 Timer ground to base audio J11, 1
    - Connect an unused Timer Vehicle Detect input (1-6) to base audio J11, 2
    - Assign the Timer Vehicle (1-6) as GREET and configure for negative detection.

**J19 - Input/Output**
- Early Warning In (Active Low)
- Grounded
- NC
- Switch closure to activate Alert Message 1

**Wiring Diagram for Alert Input from Timer**
- Relay activated for timer closure

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This wiring diagram only shows Lane 2 connections for a Dual-Lane drive-thru.

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

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**Wiring Diagram**
Dual-Lane or Tandem
Full-Duplex Drive-Thru System
with VDB, Switcher Board and IC300
(Lane 2 connections)
This wiring diagram is for a Single-Lane drive-thru, or for Lane 1 of a Dual-Lane drive-thru. For Lane 2 of a Dual-Lane drive-thru, refer to the wiring diagram on the next page.
Full-Duplex, Switcher Board and Microphone (Lane 2 connections)

Outside Speaker to J2, 1 & 2

IMPORTANT Microphone and speaker must use separate cables.

Microphone
- Port connection only - White
- Speaker audio connections Black
- J1, 1
- J1, 2
- J1, 3
- J1, 4

Timer System
- Positive Vehicle Detect Signal (+11V Minimum) to J3, 10
- Negative Vehicle Detect Signal to J3, 9
- Ground to J3, 8
- J4, 6
- J4, 5
- J4, 4
- J4, 3
- J4, 2
- J4, 1

NOTE: If using the Microphone and Speaker, do not use J3 pins 6 & 7 for Ground. See Timer System Alternate Greet Wiring for details.

External Detector
- Negative Vehicle Detect Signal to J3, 5
- Ground to J3, 4
- Positive Vehicle Detect Signal (+11V Minimum) (When not using optional VDB) to J3, 3

Backup System
- Negative Vehicle Detect Signal to J4, 3
- Ground to J4, 4
- Positive Vehicle Detect Signal (+11V Minimum) to J4, 2
- Speaker/Microphone to J4, 1

NOTE: If using an existing 12VDC power adapter, use only J3, 1 & 2 for AC & GND.

Power Connection only - White

24 V DC Power Adapter to J3, DC+ DC- & GND

VDB LANE 2 Vehicle Detector Board (optional)

Timer System
- Alternate Greet Wiring
- If using an Internal Message Repeater, connect System 38 Timer ground to base audio J11, 1.
- To J11, 2 Connect an unused timer Vehicle Detector input (1-4) to base audio J11, 2. Assign the timer
- Vehicle (1-4) as GREET and configure for negative detection.

J11 - Input/Output
- Early Warning in (Active Low) to J11, 4
- NC to J11, 7
- Ground to J11, 3
- Switch closure to activate Alert in Alert Message 6

Wiring Diagram for Alert Input from Timer

VDB LANE 1
VDB LANE 2

This wiring diagram only shows Lane 2 connections for a Dual-Lane drive-thru.

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

Wiring Diagram
- Dual-Y-Lane or Tandem Full-Duplex Drive-Thru System with VDB, Switcher Board and Microphone (Lane 2 connections)
Half-Duplex, but no Switcher Board (Lane 1 or Single Lane connections)

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

For Lane 2 of a Dual-Lane drive-thru, refer to the wiring diagram on the next page.
Half-Duplex, but no Switcher Board (Lane 2 connections)

This wiring diagram only shows Lane 2 connections for a Dual-Lane drive-thru.

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

NOTE: If using an existing 16VAC power adapter, use only J3, 1 & 2 for AC+ & AC-.

Wiring Diagram for Alert Input from Timer

Refer to control of timer device.

Wiring Diagram for Alert Input from Timer

Dual/Lane or Tandem Half-Duplex Drive-Thru System with VDB but no Switcher Board (Lane 2 connections)
Half-Duplex, and Switcher Board (Lane 1 or Single Lane connections)

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

For Lane 2 of a Dual-Lane drive-thru, refer to the wiring diagram on the next page.
Half-Duplex, and Switcher Board (Lane 2 connections)

**Outside Speaker/Microphone**

- to J3, 3, 4, & 5 (3 is for shield)

**Timer System**

- Positive Vehicle Detect Signal (+11V Minimum)
  - to J3, 10
- Negative Vehicle Detect Signal
  - to J3, 1

**NOTE:** If using the Internal Message Repeater, do not use J3 pins 6 & 7 for Gear. See Timer System Alternate Greeting Wiring at far right.

**External Detector**

- Negative Vehicle Detect Signal
  - to J3, 5
- Ground
  - to J3, 4

- Positive Vehicle Detect Signal (+11V Minimum) (When not using optional VDB)
  - to J3, 3

**Backup System**

- Negative Vehicle Detect Signal
  - to J4, 5
- Ground
  - to J4, 4

- Positive Vehicle Detect Signal (+11V Minimum)
  - to J4, 3

- Speaker/Microphone
  - to J4, 7
- Speaker/Microphone
  - to J4, 8

**Switcher Board (optional)**

The S2 switch must be IN only when a wired backup system is being used. OUT all other times.

**Timer System Alternate Greeting Wiring**

- If using an Internal Message Repeater, connect System A Timer ground to base audio J11, 1.
- Connect an unused timer Vehicle Detect input (1-6) to base audio J11, 2.
- Assign the timer Vehicle input to GREET and configure for negative detection.

**Underground Loop**

- to J11, 1
- to J11, 2

**“A” Decode (Active Low)**

- to J11, 2

**Isolated Vehicle Detect Ground**

- to J11, 3

**Isolated Vehicle Detect Signal (Active Low)**

- to J11, 4

**Wiring Diagram for Alert Input from Timer**

**J19 - Input/Output**

- Early Warning (Active Low)
  - Ground
  - NC
  - NC

- Switch closure to activate Alert Message 6

**VDB LANE 1**

- to J2, 4

**VDB LANE 2**

- to J2, 3

**Wiring Diagram**

Dual/Lane or Tandem

Half-Duplex Drive-Thru System

with VDB and Switcher Board

(Lane 2 connections)

This wiring diagram only shows Lane 2 connections for a Dual-Lane drive-thru.

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

**24 VDC Power Adapter**

- to J3, DC+ & DC- & GND

**NOTE:** If using an existing 16 VAC power adapter, use only J3, 1 & 2 for AC+ & AC-.
Wiring diagram

Optional Equipment

Remote Speed Team Switch, SW2

Remote Operator Switch, MS1000

to J6, 1 = Signal, 3 = GND

to J6, 2 = Signal, 5 = GND

to J6, 3 = Signal, 6 = GND

to J6, 4 = Signal, 5 = GND

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

VDB LANE 1 (line 1)
VDB LANE 2 (line 2)

NOTE: Arrows indicate signal direction.

Telephone Interface

J1

1. Tx Audio 2 to J15, 1
2. +12V to J15, 2
3. A2 Talk L to J15, 3
4. B2 Talk L to J15, 4
5. Alert to J15, 5
6. Veh Data to J15, 6
7. Ground to J15, 7
8. Rx Audio B2 to J15, 8

Phone Jack Splitter

Optional Equipment Wiring Diagram