NEW eHHDLU 69001074-080/-081

HCR-25 Cockpit Voice Recorder (CVR)

HCR-25 Flight Data Recorder (FDR)

Honeywell

NEW eHHDLU FOR HONEYWELL RECORDERS

eHHDLU is used to download data from flight data & voice cockpit recorders

eHHDLU connects with recorders via two types of connection :

- Ethernet
  - RJ45 cable
  - Ethernet-to-USB adapter

HFR5 (5th Generation) SSFDR & SSCVR   **HCR-25 (CVR)**   **HCR-25 (FDR)**

- RS422
  - Serial-to-USB FTDI cable used

SSFDR,SSCVR,DVDR   **AR-FDR, AR-CVR ,AR-COMBI**

eHHDLU connectivity

- Under European Aviation Safety Agency's (**EASA)** Commission Regulation (EU) 2015/2338, aircraft with a maximum takeoff weight of 27 000 kg (59,500 pounds) manufactured after Jan. 1, 2021 must feature a **CVR** with a **recording duration** of at **least 25 hours** and the ability to accurately determine the location of an aircraft accident

- The National Transportation Safety Board (NTSB) provided the following two recommendations to the U.S. Federal Aviation Administration (FAA):

  "Require all newly manufactured airplanes that must have a cockpit voice recorder (CVR) be fitted with a CVR capable of recording the last 25 hours of audio"; and,

  "By January 1, 2024, require retrofit of all cockpit voice recorders (CVR) on all airplanes required to carry both a CVR and a flight data recorder with a CVR capable of recording the last 24 hours of audio."

Regulatory Agency Statements

NEW eHHDLU FOR HONEYWELL RECORDERS - Continued

- Honeywell introducing a new Extended Handheld Download Unit (eHHDLU) into the market effective December 2020

- P/N for new eHHDLU is P/N 69001074-080 & P/N 69001074-081

- The -080/-081 eHHDLU is compatible with the new HON HCR-25 hour recorder systems

- The new eHHDLU offers compatibility with the new HCR-25 allowing operators to achieve commonality within their existing fleet and planned fleet expansions.

- New Honeywell proprietary software application developed and preinstalled in the -080/-081 eHHDLU

Introduction of new E-HHDLU unit

NEW eHHDLU FOR HONEYWELL RECORDERS - Continued

Windows Mobile device (PN 69001074-060 & -070):

- Trimble Nomad Outdoor Ruggedized Handheld Computer (Model 900B)
- Windows Mobile 6.1
- 128 MB RAM
- 512 MB Non-volatile Flash storage
- CF and SD/SDHC expansion slots (4GB CF Memory Card included (used for flight data storage))
- Touchscreen (Stylus)
- USB ports
- AC Charger and international adapters
- Weight: 700 g (1.54 lb) including battery

Note:

Windows Mobile OS support on Trimble

Nomad devices was discontinued by

Microsoft

Android Mobile device (PN 6901074-080/-081):

- Janam Ruggedized Handheld Computer (XT3)
- Android 9 (PIE)
- 4 GB RAM / 64GB ONBOARD OR 3 GB RAM / 32GB ONBOARD
- includes internal flash storage (64 GB) for OS and user data
- Multi-touch capacitive touch screen
- USB-C 3.0 port
- Battery RECHARGEABLE 2900mAh
- AC Charger and international adapters
- Weight 272g (0,6 lb) including battery

Windows Mobile device (dash-60 & -70) versus Android device (dash-80/-081)

NEW eHHDLU FOR HONEYWELL RECORDERS - Continued

- Can this eHHDLU download this recorder?

Recorder	P/N 69001074-060	P/N 69001074-070	P/N 69001074-080 P/N 69001074-081
SSUFDR 980-4120 -XXX	No	Yes	Yes
SSFDR 980-4700 -XXX	Yes	Yes	Yes
SSCVR 980-6020-XXX/6022-XXX	No	Yes	Yes
AR-FDR 980-4710-XXX	Yes	Yes	Yes
AR-COMBI 980-6021-XXX	Yes	Yes	Yes
DVDR 980-6025-XXX	Yes	Yes	Yes
HFR5-D SSFDR 980-4750-XXX	Yes	Yes	Yes
HFR5-V SSCVR 980-6032-XXX	Yes	Yes	Yes
HCR-25 FDR 69004750-XXX	No	No	Yes
HCR-25 CVR 69004751-XXX	No	No	Yes
LW-HR25 69004755-XXX	No	No	Yes

Compatibility table for e HHDLUs

NEW eHHDLU FOR HONEYWELL RECORDERS - Continued

EHHDLU content		P/N 69001074-080	P/N 69001074-081	P/N 79001869-2 Conversion kit from -060 to -080	P/N 79001869-3 Conversion kit from -070 to -080
69005886-001	HANDHELD COMPUTER FOR EHHDLU	Yes	Yes	Yes	Yes
69005887-001	ADAPTER ETHERNET AND USB-A to USB-C	Yes	No	Yes	Yes
704-2864-041	DATA DOWNLOAD CABLE FOR HFR5 SSCVR	Yes	No	No	No
69001366-002	EHHDLU TO SSFDR DOWNLOAD CABLE	Yes	No	No	No
69001369-003	EHHDLU TO AR-SERIES AND DVDR DOWNLOAD CABLE	Yes	No	No	No
704-3058-002	ADAPTER CABLE, SSCVR, ONBOARD DOWNLOAD	Yes	No	Yes	No
69005753-102	EHHDLU Application Software CD-ROM	Yes	Yes	Yes	Yes

eHHDLU offer/ Conversion kit offer / PN matrix

NEW eHHDLU FOR HONEYWELL RECORDERS - Continued

Key Features new eHHDLU:

- Added download support of new generation of Honeywell recorders addressing 25Hrs CVR recording mandate: HCR-25 FDR - P/N -69004750-XXX
                                                                                  HCR-25 CVR - P/N -69004751-XXX
                                                                                  LW-HR25   - P/N -69004755-XXX
- Multi- touch capacitive touch screen Janam Ruggedized Handheld
- Computer (Model XT3)
- Android 9 (PIE) mobile handheld computer with Honeywell proprietary
- software application
- 4GB RAM/ 64GB Onboard or 3 GB RAM/32 GB Onboard
- Includes internal flash storage (64GB) for OS and user data
- USB-C 3.0 port
- Battery RECHARGEABLE 2900mAh
- Weight 272g (0,6 lb) including battery
- Direct data transfer via USB port to Windows PC / laptop or centralized data repository
- Using lightweight & ruggedized Android device:
    - with larger display
    - with higher resolution
    - longer battery duration
    - faster charging vs legacy Windows device (incl in dashes -060,-070)

Key Benefits new eHHDLU:
- OEM solution offering global support network
- Optimized and improved download data speed, <10 minutes "On Wing" data transfer time removing down-time required to remove FDR from aircraft for download

Key features, key benefits of new eHHDLU

THE FUTURE IS WHAT WE MAKE IT.

Honeywell