

# **INSTALLATION GUIDE**

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**HVS-DNT**  
Dante I/F Card

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2<sup>nd</sup> Edition

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# Upon Receipt

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HVS-DNT cards are Dante audio input/output option for HVS-490, HVS-190S, HVS-190I and HVS-Q12 switchers.

When the card is installed, switchers can connect Dante devices via LAN and send and receive audio streams. They can also embed Dante audio sources to SDI output on the card or assign them to audio output signals on the switchers.

Check your received items against the packing lists below. Check to ensure no damage has occurred during shipment. If damage has occurred, or items are missing, inform your supplier immediately.

◆ **HVS-DNT Box**

ITEM	QTY	REMARKS
HVS-DNT	1	
Binding screw	2	For securing card (Spare screws)
Installation guide	1	(This guide)

 <b>CAUTION</b>	The HVS-DNT cards are inserted from the rear of the main unit. The installation of expansion cards should only be done by qualified technical personnel. To protect the card from electrostatic damage, do not touch the components on the card.
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## Trademarks

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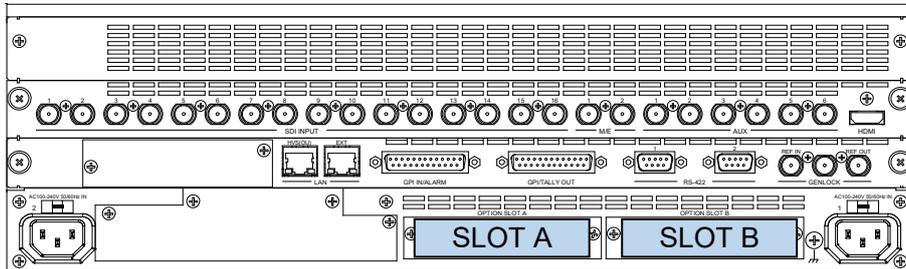
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\* All other trademarks are trademarks or registered trademarks of their respective owners.

# 1. Installing onto HVS-490

## 1-1. Card Installation Slot

The HVS-DNT cards can be installed onto SLOT-A and SLOT-B from the HVS-490 rear panel.



## 1-2. Inserting a Card into a Slot

- (1) Turn off the power of your switcher and disconnect the power cord(s).
- (2) Remove the two screws securing the blank panel and remove the blank panel.
- (3) Position the card between the guide rails of the slot and insert the card into the slot.

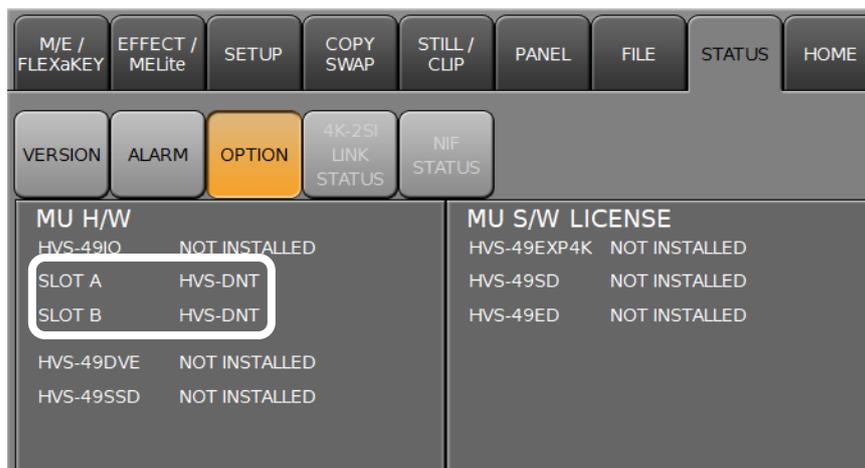
### NOTE

Do not force the card into the slot. When inserting, be sure that the card is firmly positioned between the guide rails and not tilted.

- (4) Make sure that the card is inserted correctly and tighten both screws on the rear panel.
- (5) Connect the power cord and turn on the power of the switcher.

## 1-3. Checking the Installation

Open the [STATUS > OPTION] menu to see that the HVS-DNT card you have installed into the slot is properly recognized.



## 1-4. Input Channel Settings

The HVS-DNT card can accept up to 64 channels of Dante audio and up to two SDI signals (with 16 channels of audio for each). It can also receive an SDI signal from the switcher as audio sources (16 channels of audio).

Dante audio input settings should be made in the [SETUP > AUDIO AES Dante > Dante Dante I/O] menu.

Audio settings of SDI inputs on the card should be made in the [SETUP > AUDIO AES Dante > Dante SDI I/O] menu.

Audio source settings from the switcher should be made in the [SETUP > AUDIO AES Dante > Dante ANC DATA] menu.

These signal names are used for optional input settings.

Card slot	Signal name		
	Dante audio input	SDI input *	Audio source from the switcher
SLOT-A	Dante IN-A	IN33 IN34	ANC DATA(Dante A)
SLOT-B	Dante IN-B	IN37 IN38	ANC DATA(Dante B)

\* There are two SDI ports on the card and input/output selectable for each. In the table above, both ports are set as input.

\* Refer to the "HVS-490 User Manual" for details on the optional input settings.

## 1-5. Output Channel Settings

The HVS-DNT card can output up to 64 channels of Dante audio and up to 2 SDI (with 16 channels of audio) signals. It can also pass two sets of 16-ch audio to the switcher to replace embedded audio channels of SDI outputs using ANC data replacement procedure.

Dante audio output settings should be made in the [SETUP > AUDIO AES Dante > Dante Dante I/O] menu.

SDI output settings should be made in the [SETUP > AUDIO AES Dante > Dante SDI I/O] menu.

ANC data (audio) replacements should be made in the [SETUP > AUDIO AES Dante > Dante ANC DATA] menu.

These signal names are used for optional output settings.

Card slot	Signal name		
	Dante audio output	SDI output *	ANC data (audio) for replacement
SLOT-A	Dante OUT-A	AUX13 AUX14	ANC DATA(Dante A1) ANC DATA(Dante A2)
SLOT-B	Dante OUT-B	AUX17 AUX18	ANC DATA(Dante B1) ANC DATA(Dante B2)

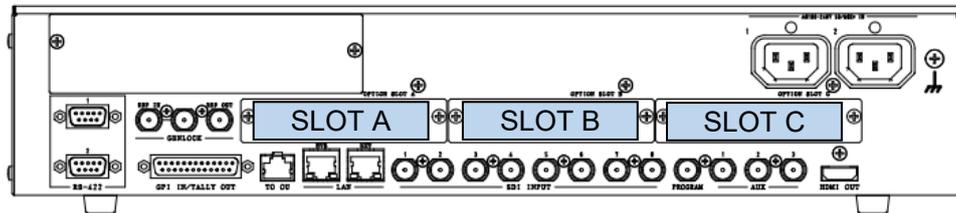
\* There are two SDI ports on the card and input/output selectable for each. In the table above, both ports are set as output.

\* Refer to the "HVS-490 User Manual" for details on the optional output settings.

## 2. Installing onto HVS-190S

### 2-1. Card Installation Slot

The HVS-DNT cards can be installed onto SLOT-A to SLOT-C from the HVS-190S rear panel.



### 2-2. Inserting a Card into a Slot

- (1) Turn off the power of your switcher and disconnect the power cord(s).
- (2) Remove the two screws securing the blank panel and remove the blank panel.
- (3) Position the card between the guide rails of the slot and insert the card into the slot.

#### NOTE

Do not force the card into the slot. When inserting, be sure that the card is firmly positioned between the guide rails and not tilted.

- (4) Make sure that the card is inserted correctly and tighten both screws on the rear panel.
- (5) Connect the power cord and turn on the power of the switcher.

### 2-3. Checking the Installation

Open the [SETUP > STATUS > OPTION] menu to see that the HVS-DNT card you have installed into the slot is properly recognized.

```
STATUS :SLOT-A :HVS-DNT > VXX-XX : 1/9
OPTION :SLOT-B :(NOT INSTALED) :
```

```
STATUS :SLOT-C :HVS-DNT > VXX-XX : 2/9
OPTION :HVS-190ED >INSTALED :
```

## 2-4. Input Channel Settings

The HVS-DNT card can accept up to 64 channels of Dante audio and up to two SDI signals (with 16 channels of audio for each). It can also receive an SDI signal from the switcher as audio sources (16 channels of audio).

Dante audio input settings should be made in the [SETUP > FUNCTION > DNT > Dante] menu. Audio settings of SDI inputs on the card should be made in the [SETUP > FUNCTION > DNT > SDI] menu.

Audio source settings from the switcher should be made in the [SETUP > FUNCTION > DNT > ANC DATA] menu.

Use these names for the optional input settings.

Card slot	Signal name		
	Dante audio input	SDI input *	Audio source from the switcher
SLOT-A	DNT-A	IN09 IN10	ANC-A
SLOT-B	DNT-B	IN13 IN14	ANC-B
SLOT-C	DNT-C	IN17 IN18	ANC-C

\* There are two SDI ports on the card and input/output selectable for each. In the table above, both ports are set as input.

\* Refer to the "HVS-190 User Manual" for details on the optional input settings.

## 2-5. Output Channel Settings

The HVS-DNT card can output up to 64 channels of Dante audio and up to 2 SDI (with 16 channels of audio) signals. It can also pass two sets of 16-ch audio to the switcher to replace embedded audio channels of PGM, PVW, CLN or AUX outputs using ANC data replacement procedure.

Dante audio output settings should be made in the [SETUP > FUNCTION > DNT > Dante] menu.

SDI output settings should be made in the [SETUP > FUNCTION > DNT > SDI] menu.

ANC data (audio) replacements should be made in the [SETUP > FUNCTION > DNT > ANC DATA] menu.

Use these names for the optional output settings.

Card slot	Signal name		
	Dante audio output	SDI output *	ANC data (audio) for replacement
SLOT-A	DNT-A	OUT-A1 OUT -A2	ANC-A1 ANC-A2
SLOT-B	DNT-B	OUT -B1 OUT -B2	ANC-B1 ANC-B2
SLOT-C	DNT-C	OUT -C1 OUT -C2	ANC-C1 ANC-C2

\* There are two SDI ports on the card and input/output selectable for each. In the table above, both ports are set as output.

\* Signal settings of OUT-A1, A2, B1, B2, C1 and C2 outputs are made in the [SETUP > OUTPUT > OPTION] menu.

\* Refer to the "HVS-190 User Manual" for details on the optional output settings.

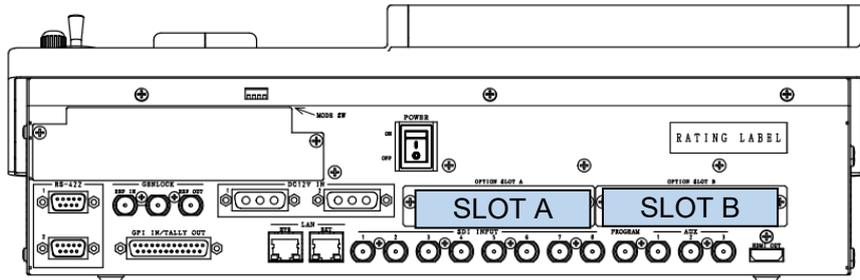
### 3. Installing onto HVS-190I

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#### 3-1. Card Installation Slot

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The HVS-DNT cards can be installed into SLOT-A and SLOT-B from the HVS-190I rear panel.



#### 3-2. Inserting a Card into a Slot

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- (1) Turn off the power of your switcher and disconnect the power cord(s).
- (2) Remove the two screws securing the blank panel and remove the blank panel.
- (3) Position the card between the guide rails of the slot and insert the card into the slot.

**NOTE**

Do not force the card into the slot. When inserting, be sure that the card is firmly positioned between the guide rails and not tilted.

- (4) Make sure that the card is inserted correctly and tighten both screws on the rear panel.
- (5) Connect the power cord and turn on the power of the switcher.

#### 3-3. Checking the Installation

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Open the [SETUP > STATUS > OPTION] menu to see that the HVS-DNT card you have installed into the slot is properly recognized.

```
STATUS  :SLOT-A :HVS-DNT      > VXX-XX  : 1/9
OPTION  :SLOT-B :(NOT INSTALED) :
```

## 3-4. Input Channel Settings

The HVS-DNT card can accept up to 64 channels of Dante audio and up to two SDI signals (with 16 channels of audio for each). It can also receive an SDI signal from the switcher as audio sources (16 channels of audio).

Dante audio input settings should be made in the [SETUP > FUNCTION > DNT > Dante] menu. Audio settings of SDI inputs on the card should be made in the [SETUP > FUNCTION > DNT > SDI] menu.

Audio source settings from the switcher should be made in the [SETUP > FUNCTION > DNT > ANC DATA] menu.

Use these names for the optional input settings.

Card slot	Signal name		
	Dante audio input	SDI input *	Audio source from the switcher
SLOT-A	DNT-A	IN09 IN10	ANC-A
SLOT-B	DNT -B	IN13 IN14	ANC-B

\* There are two SDI ports on the card and input/output selectable for each. In the table above, both ports are set as input.

\* Refer to the "HVS-190 User Manual" for details on the optional input settings.

## 3-5. Output Channel Settings

The HVS-DNT card can output up to 64 channels of Dante audio and up to 2 SDI (with 16 channels of audio) signals. It can also pass two sets of 16-ch audio to the switcher to replace embedded audio channels of PGM, PVW, CLN or AUX outputs using ANC data replacement procedure.

Dante audio output settings should be made in the [SETUP > FUNCTION > DNT > Dante] menu.

SDI output settings should be made in the [SETUP > FUNCTION > DNT > SDI] menu.

ANC data (audio) replacements should be made in the [SETUP > FUNCTION > DNT > ANC DATA] menu.

Use these names for the optional output settings.

Card slot	Signal name		
	Dante audio output	SDI output *	ANC data (audio) for replacement
SLOT-A	DNT-A	OUT-A1 OUT-A2	ANC-A1 ANC-A2
SLOT-B	DNT-B	OUT-B1 OUT-B2	ANC-B1 ANC-B2

\* There are two SDI ports on the card and input/output selectable for each. In the table above, both ports are set as output.

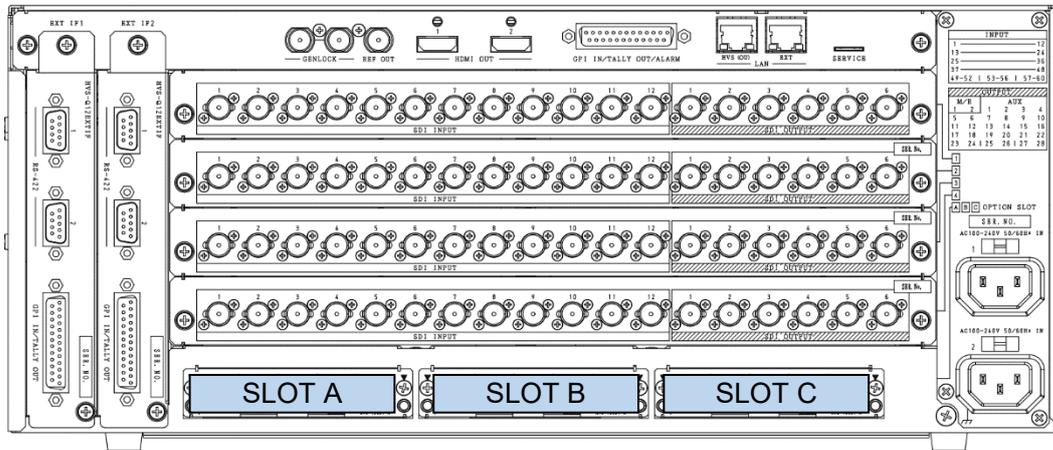
\* Signal settings of OUT -A1, A2, B1 and B2 outputs are made in the [SETUP > OUTPUT > OPTION] menu.

\* Refer to the "HVS-190 User Manual" for details on the optional output settings.

## 4. Installing onto HVS-Q12

### 4-1. Card Installation Slot

The HVS-DNT cards can be installed onto SLOT-A , SLOT-B and SLOT-C from the HVS-Q12 rear panel.



### 4-2. Inserting a Card into a Slot

- (1) Turn off the power of your switcher and disconnect the power cord(s).
- (2) Remove the two screws securing the blank panel and remove the blank panel.
- (3) Position the card between the guide rails of the slot and insert the card into the slot.

#### NOTE

Do not force the card into the slot. When inserting, be sure that the card is firmly positioned between the guide rails and not tilted.

- (4) Make sure that the card is inserted correctly and tighten both screws on the rear panel.
- (5) Connect the power cord and turn on the power of the switcher.

### 4-3. Checking the Installation

Open the [STATUS > OPTION] menu to see that the HVS-DNT card you have installed into the slot is properly recognized.



## 4-4. Input Channel Settings

The HVS-DNT card can accept up to 64 channels of Dante audio and up to two SDI signals (with 16 channels of audio for each). It can also receive an SDI signal from the switcher as audio sources (16 channels of audio).

Dante audio input settings should be made in the [SETUP > Dante > Dante Dante I/O] menu.

Audio settings of SDI inputs on the card should be made in the [SETUP > Dante > Dante SDI I/O] menu.

Audio source settings from the switcher should be made in the [SETUP > Dante > Dante ANC DATA] menu.

These signal names are used for optional input settings.

Card slot	Signal name		
	Dante audio input	SDI input *	Audio source from the switcher
SLOT-A	Dante IN-A	IN49 IN50	ANC DATA(Dante A)
SLOT-B	Dante IN-B	IN53 IN54	ANC DATA(Dante B)
SLOT-C	Dante IN-C	IN57 IN58	ANC DATA(Dante C)

\* There are two SDI ports on the card and input/output selectable for each. In the table above, both ports are set as input.

\* Refer to the "HVS-Q12 User Manual and Appendix" for details on the optional input settings.

## 4-5. Output Channel Settings

The HVS-DNT card can output up to 64 channels of Dante audio and up to 2 SDI (with 16 channels of audio) signals. It can also pass two sets of 16-ch audio to the switcher to replace embedded audio channels of SDI outputs using ANC data replacement procedure.

Dante audio output settings should be made in the [SETUP > Dante > Dante Dante I/O] menu.

SDI output settings should be made in the [SETUP > Dante > Dante Dante I/O] menu.

ANC data (audio) replacements should be made in the [SETUP > AUDIO AES Dante > Dante ANC DATA] menu.

These signal names are used for optional output settings.

Card slot	Signal name		
	Dante audio output	SDI output *	ANC data (audio) for replacement
SLOT-A	Dante OUT-A	AUX23 AUX24	ANC DATA(Dante A1) ANC DATA(Dante A2)
SLOT-B	Dante OUT-B	AUX25 AUX26	ANC DATA(Dante B1) ANC DATA(Dante B2)
SLOT-C	Dante OUT-C	AUX27 AUX28	ANC DATA(Dante C1) ANC DATA(Dante C2)

\* There are two SDI ports on the card and input/output selectable for each. In the table above, both ports are set as output.

\* Refer to the "HVS-Q12 User Manual and Appendix" for details on the optional output settings.