

hear back PRO

PERSONAL MONITOR MIXER SYSTEM

Word Clock Input/Output Card



SCAN
CODE
FOR USER
GUIDE

OVERVIEW

The Word Clock Card was developed for instances where multiple digital audio sources exist in one system and word clock synchronization is necessary to keep all digital audio devices in sync. An example might include a ProTools HD interface feeding our AES/EBU card with channels 1 through 14 but a microphone preamplifier with AES/EBU output is used to feed channels 15/16 as a talkback microphone into the system. In this scenario, ProTools will likely be the master clock and a word clock would connect from the ProTools HD output to the Microphone Preamp and also to the Word Clock Card.

FEATURES

- Works with both the Hear Back PRO Hub and the WSG Bridge
- Works in conjunction with any of the Hear Back PRO and WSG Bridge I/O cards
- Has both Word Clock Input and Output BNC connections
- Supports 44.1k, 48k, 88.2k, 96k, 176.4k, and 192k sampling rates
- Automatically detects sampling rate and locks onto incoming word clock with a precision PLL circuit

NOTE: The Word Clock Card will work with PRO Hubs loaded with V6.0 or higher. The WSG Bridge must have version 4.5 or higher.

PRO HUB CONFIGURATION (V6.0 or higher)

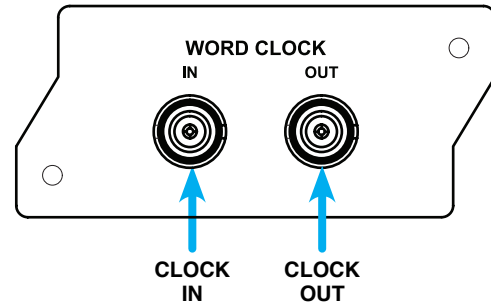
A text file stored internally on the PRO Hub is used for configuration. Plug a USB cable into the Main card's PROGRAM port and the device will show up as a drive on your computer, named "HB_PRO" or similar. Click on this icon and you will see a CONFIG.txt file. Open the file to edit:

```
## Hear Technologies Configuration File v2.0
## Clock Configuration
## Choose External if Word Clock Card
## is installed in a slot
## For external clock: Input A = External
## For internal clock: Input A = Internal
##
## Stereo Channel Link Configuration
## For mono channels: CHANNEL 1&2 = MONO
## For stereo channels: CHANNEL 1&2 = STEREO
## Valid channels are 1 through 32
```

```
Input A = Internal
Input B = Internal
```

```
CHANNEL 1& 2 = MONO
CHANNEL 3& 4 = MONO
CHANNEL 5& 6 = MONO
CHANNEL 7& 8 = MONO
CHANNEL 9&10 = MONO
CHANNEL 11&12 = MONO
CHANNEL 13&14 = MONO
CHANNEL 15&16 = MONO
CHANNEL 17&18 = MONO
CHANNEL 19&20 = MONO
CHANNEL 21&22 = MONO
CHANNEL 23&24 = MONO
CHANNEL 25&26 = MONO
CHANNEL 27&28 = MONO
CHANNEL 29&30 = MONO
CHANNEL 31&32 = MONO
```

NOTE: ## denotes
comment



To use the Word Clock Card with another I/O card, such as a Dante Card, in slot 1 (Input A), install the Word Clock Card into slot 2. Edit the text file to read "External" for Input A as shown below:

```
Input A = External
Input B = Internal
```

To disable the Word Clock Card, simply change "External" back to "Internal."

```
Input A = Internal
Input B = Internal
```

The Word Clock Card may also be placed into slot 4 if it is available and an input card is present in slot 3 (such as a Waves SoundGrid Card). Same process as above, however Input B would be set to "External."

```
Input A = Internal
Input B = External
```

WSG BRIDGE CONFIGURATION (V4.5 or higher)

To use the Word Clock Card with an I/O card in slot 1 (such as Dante or MAD1), place the Clock Card in slot 2. Move the Clock Source Switch on the front panel to "EXT" enabling the Clock Card. To disable the Clock Card, move the Clock Source Switch to "A" or "B". To use the Clock Card with an I/O card in slot 3 (such as Waves), place the Clock Card in slot 4. Moving the Clock Source Switch to "EXT" will enable the Clock Card. Move the Clock Source Switch to "A" or "B" to disable it.

TECHNICAL SPECIFICATIONS

Word Clock Input

Impedance:	75 ohms
Capacitance:	4.5pF
Voltage:	2 to 5.5 volts
Frequency:	44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz

Word Clock Output

Impedance:	75 ohms
Capacitance:	5.5pF
Voltage:	3.3 volts
Frequency:	44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz



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