

USER MANUAL

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Software Version Nomad 7.77



ZAXCOM.COM



Zaxcom Nomad

Sound bag audio redefined

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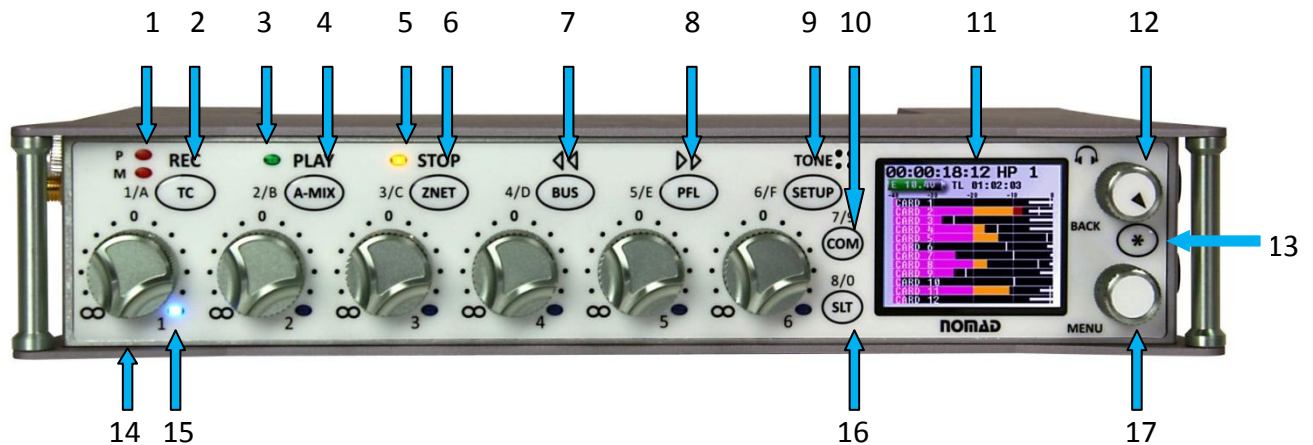
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Know Your Nomad

Front Panel

**1. Primary/Mirror Record LEDs**

Indicates Nomad is in record mode and which card is being written to (Primary Card, Mirror Card). The mirror LED will only flash when data is being written to the mirror card.

2. TC / REC / 1 / A - multi-function key

Shifted mode

- A quick press opens the time code slate - additional presses will access the time code menus.
- Pressed and held for one second, puts Nomad into record.

Unshifted mode

- A quick press will put Nomad into record.

3. Play LED

Indicates Nomad is playing back.

4. A-MIX / Play / 2 / B – multi-function key

Shifted mode

- When Auto-Mix is engaged, and MP3 support is off, pressing will access the Auto-Mix menu
- When Auto-Mix is off and MP3 support is off pressing will access the Meta-Data page.
- Pressed and held for one second, puts the unit into playback mode.

Unshifted mode

- A quick press will put Nomad into playback.
- When MP3 support is turned on and recording press it to toggle for MP3 marking.

5. STOP LED

Indicates Nomad is in stop mode and Nomad is neither recording nor playing back.

6. ZNET / STOP / 3 / C – multi-function key

Shifted mode

- A quick press will open up the ZaxNet adjust menu.
- Pressed and held for one second, will stop recording or stop playback.

Unshifted mode

- A quick press will stop recording or playback.
- After stopping recording press & hold for one second, opens the false start page.

7. BUS / 4 / D – multi-function key

- When in the ENG home page a single press accesses the quick pan matrix.
- A second press or a press from any other home page opens the bus routing menu.

8. **PFL / 5 / E – multi-function key**
 - Pressing from any home page put nomad into pre-fader listen mode.
 - Pressing from the metadata menu or track naming menu will open the list of presets.
9. **SETUP / TONE / 6 / F – multi-function key**
 - Pressing it opens the analog input setup page.
 - Pressed and hold for one second, toggles the tone generation on/off.
10. **COM / 7 / 9 – multi-function key**
 - Press and hold to activate the com mic.
 - When auto-pan is enabled pressing it will change the pan assignment.
 - When a number is needed in a data entry field or need to select a channel number:
11. **Color LCD Screen**

Daylight-readable color LCD screen,
12. **Headphone knob / Back knob**
 - Press it to back out of a page to the previous page.
 - Turn it to adjust headphone #1 volume.
 - Press and hold will enter user inputted data
13. **Star key**
 - From the any home meter screen, press it to advance to the next meter screen.
 - In the bus routing matrix, head phone setup matrix, and card mix matrix pressing it adds phase reverse to the cross point options.
 - In the fader assign matrix pressing it will add trim and ZaxNet to the cross point options.
 - When in the channel set up menu will toggle to the digital setup menu.
 - If pressed while powering-up, Nomad will start the software update process.
14. **Fader 1 (of 6 total)**

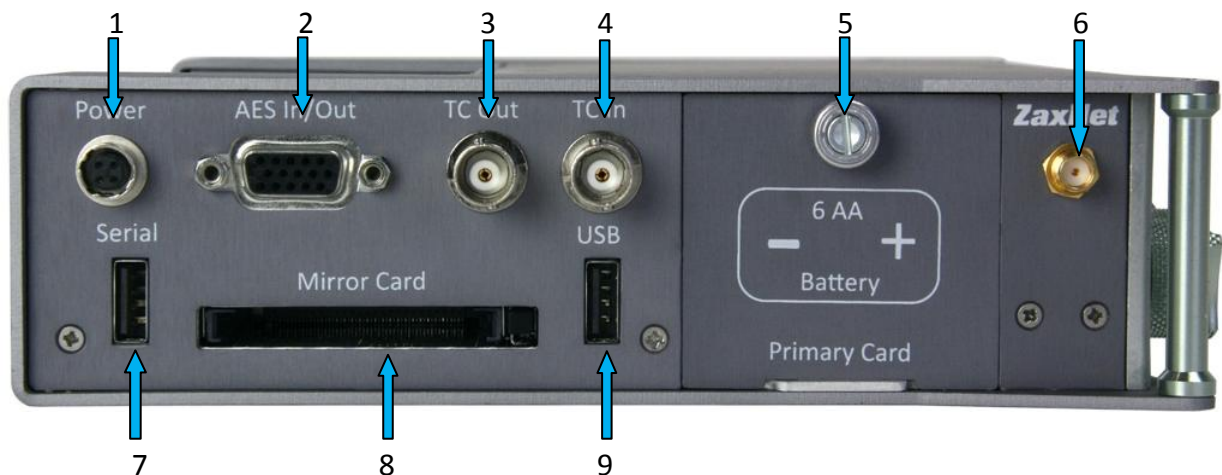
Each of six faders can be assigned to any channel or combination of channels, or act as a fader, hardware trim knob or a ZaxNet control knob.
15. **Auto-Trim™ LED (of 6 total)**

Indicates which fader is active for AutoTrim and Auto PAN.
16. **SLT / 8 / 0 key**
 - Press and hold it to activate the slate mic.
17. **MENU knob / SHIFT key**
 - From the Home page press it to access the main menu.

Note - If virtual fader engaged the menu knob will need to pushed and held to access the main menu.
 - Turn it to scroll through the items on a page.
 - Press to select a page item.
 - Shortcut - While scrolling through a parameter with a long list, pressing the MENU knob while turning it will of speed up the scroll speed by 10 times.

When alpha / numeric entry is required for some items such as timecode or user bits the multifunction keys will be used. A single press will enter the first number associated with the key and double push will access the second number / letter associated with the key.

Left Side

**1. External Power Connector (Hirose-4F)**

Nomad will run on 10 to 18 VDC {1/2 A @ 12 VDC}

WARNING: Do NOT connect the external power connector to a source higher than 18.0 VDC.

This is the ABSOLUTE upper limit. This can damage the unit's power supply and require it to be sent in for maintenance and will not be covered under the warranty.

2. AES Input / Output connector (DE-15F)

Nomad has four AES input pairs and three AES output pairs. The input has a sample-rate conversion, allowing each input to have a different sampling-rate. Nomad will accept any unlocked AES signal with a sampling-rate of 44.1 to 96 kHz. The dynamic range of the sample-rate conversion is 124 dB, offering completely transparent conversion of digital audio from one sample-rate to another.

3. Time Code Output connector (BNC)**4. Time Code Input connector (BNC)****5. Battery Door**

The Silver knob rotates counter clockwise to access the battery compartment. Behind the door is where AA battery sled is inserted, as well as where the primary compact flash card is installed. Please note that when inserting the primary card if there is any resistance the card is not aligned correctly and the pins on nomad can be damaged. Please remove the card realign.

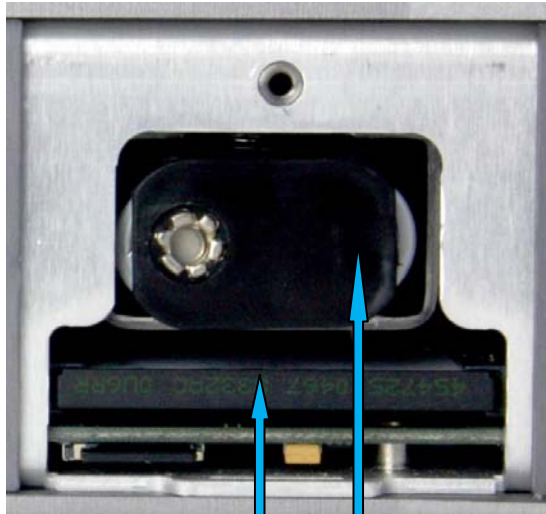
WARNING: Use ONLY NiMH rechargeable or Lithium batteries in Nomad. If alkaline batteries are used they will EXPLODE and can SEVERLY damage or DESTROY the unit.

6. ZaxNet RF connector (SMA-F)**7. Serial connector**

Connection for Zaxcom OASIS, FP8 fader panel or Mix 8 control panel.

8. Compact Flash Card Mirror Media Slot**9. USB port** *Nomad 8 and 12 only*

Used for recording to USB drives or attaching a USB keyboard (Nomad 8 and 12 only).



11

12

Battery Compartment Area
(behind the door view)



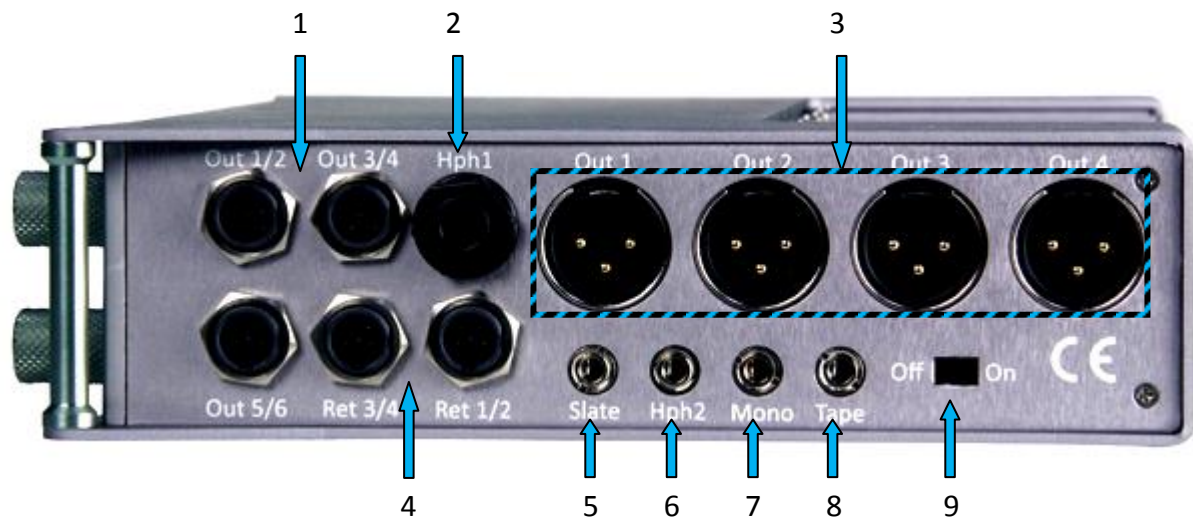
Always observe the correct battery polarity. The negative contact on the battery is always connected to the spring contact in the carrier.

10. Internal Battery Compartment

Insert the battery carrier correctly. If insert with the contacts reversed it will do no harm to the unit, Nomad just will not turn on.

11. Primary Compact Flash Card Media Slot

Right Side



1. **Outputs 1 - 6 (TA-5M)**

Outputs 6 channels of audio via output buses 1-6
 TA5 out 1/2 carries output bus 1 and 2
 TA5 out 3/4 carries output bus 3 and 4
 TA5 out 5/6 carries output bus 5 and 6

2. **Headphone #1 (1/4" stereo jack)**

3. **Outputs 1 - 4 (XLR-3M)**

Outputs 4 channels of audio via output buses 1-4
 XLR 1 carries output bus 1
 XLR 2 carries output bus 2
 XLR 3 carries output bus 3
 XLR 4 carries output bus 4

4. **Returns 1 - 4 (TA-5M)**

These inputs accept a headphone level or line-level signal (Range: -20dBu and +30dBu)

- These inputs can act as camera returns. Each input is independent and can be used to monitor audio from 4 different sources

Or

- Line level analog inputs for inputs 7 through 10

5. **External Slate Microphone input (1/8" (3.5mm) TRS jack)**

This is where the external com microphone is plugged into.

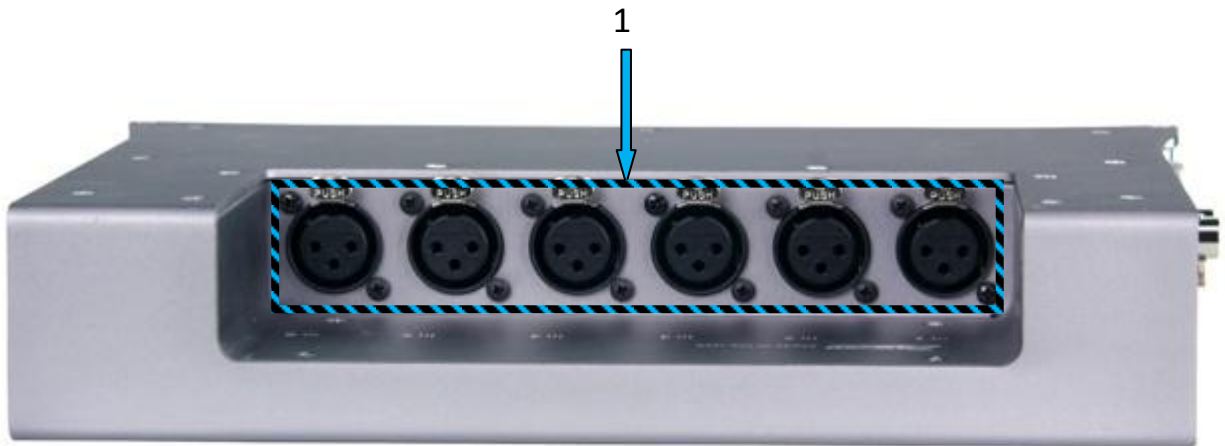
6. **Headphone #2 (1/8" (3.5mm) TRS jack)**

7. **Mono Output (1/8" (3.5mm) TRS jack)**

8. **Tape Output (1/8" (3.5mm) TRS jack)**

9. **Power Switch**

Rear



1. Mic/Line-level Inputs 1 – 6 (XLR-3F)

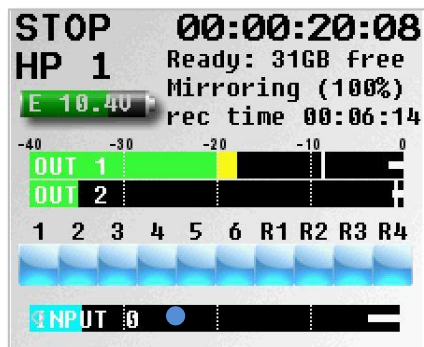
Home Screen / Meters

There are several selectable home meter screens from which to choose. These screens can be toggled through by pressing the Star key - or by pressing the menu knob and the SLT or COM key at the same time.

The color of the left half of the meter indicates the source type being metered:

- Light blue is an input
- Green is an output bus
- Purple is a recorded track

The track name, bus number or input number is indicated within each meter to aid in channel identification. If a compressor is engaged, a white gain reduction line will appear at the right side of the meter when the compression is being applied.

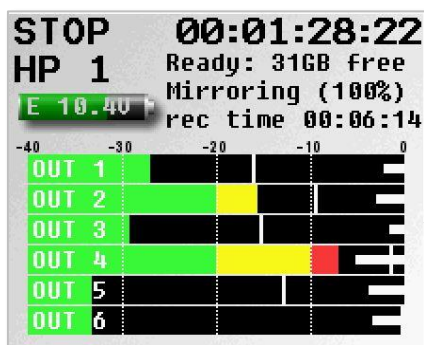


ENG Home Screen

← Output busses 1 and 2

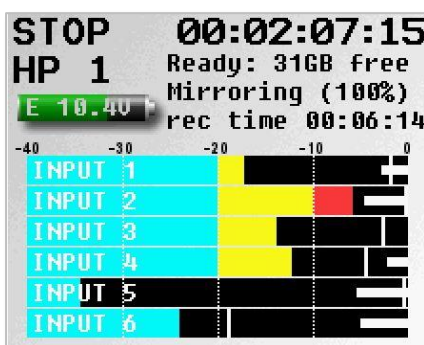
← Quick Pan Matrix

← AutoTrim Meter / Virtual Faders for mixing Inputs 7 through 10 (see ENG/EFP Bag operations)



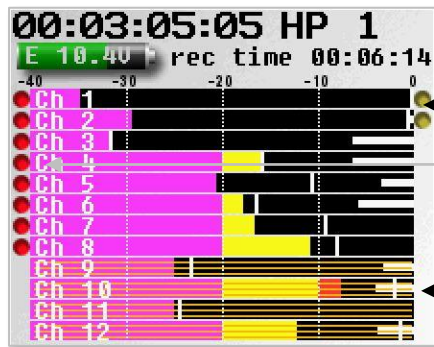
Output Bus Home Screen

← 6 Output Busses



6 Input Home Screen

← Input signal from XLR Inputs

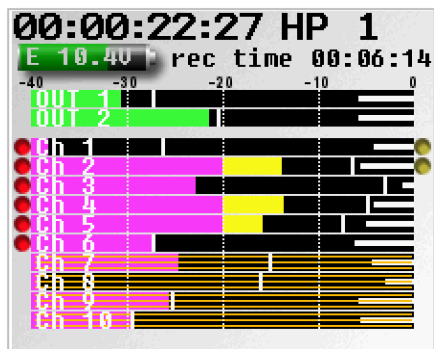


Yellow ISO Attenuation Enabled

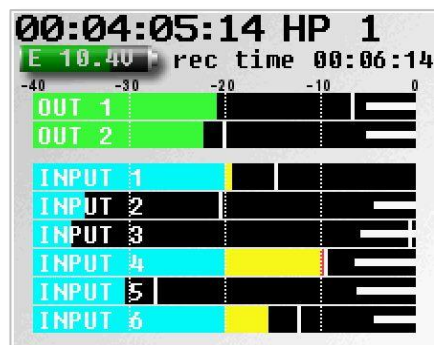
Red Record Enabled Indicators - shows which tracks will be recorded

Yellow Strike Through – Represents that these tracks will not be recorded

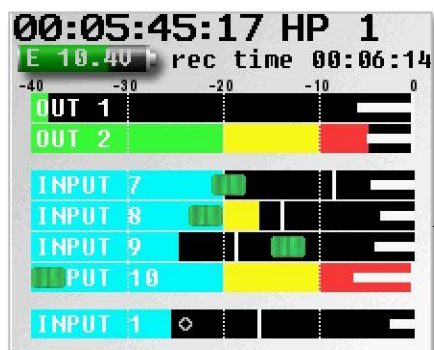
Card Track Home Screen



Card Tracks with Output Buses 1 and 2

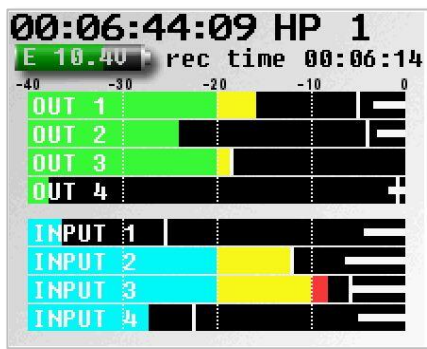


Output Bus with Inputs

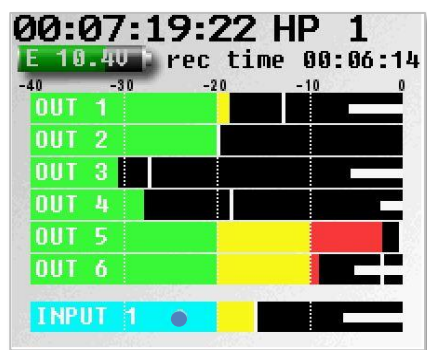


Line level inputs 7 through 10 with virtual fader control

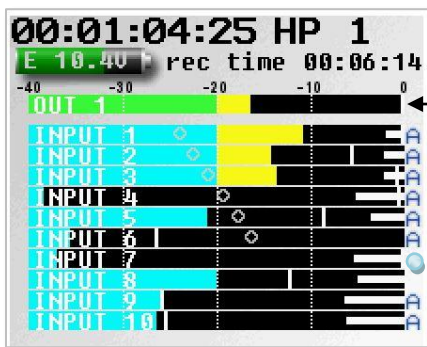
Virtual Fader Home Screen



4 Out / 4 In



6 Output Busses with Input Trim



Auto-Mix Meter Screen

Output Bus 1 (Auto-Mix Output)

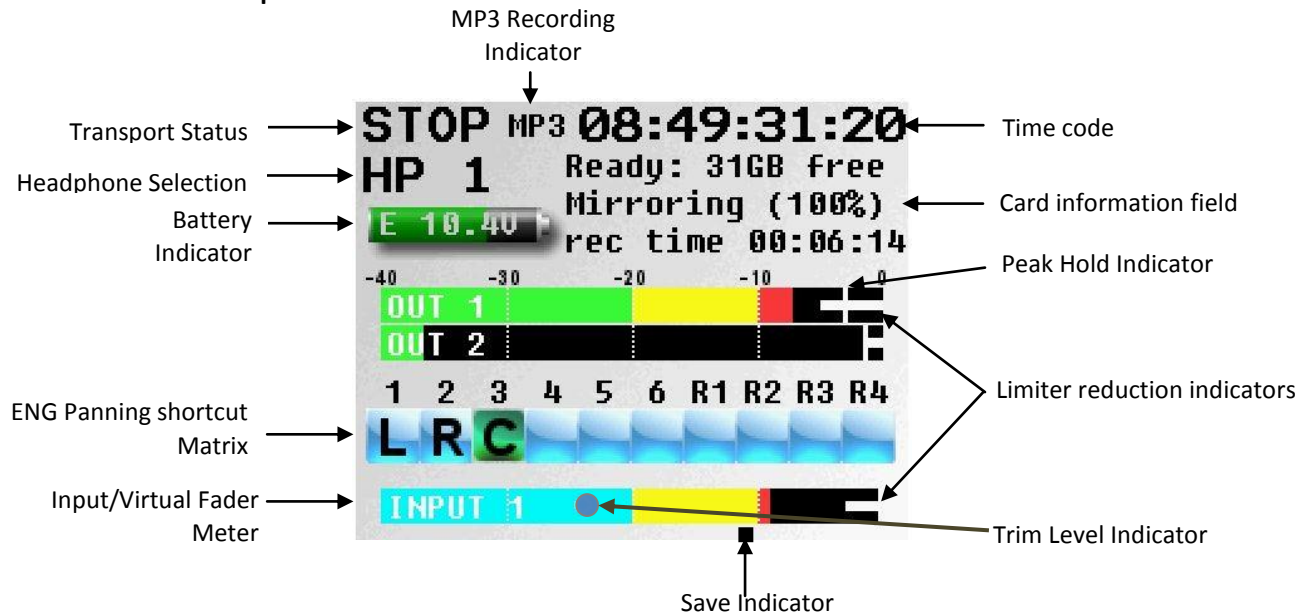
Auto-Mix Inputs - "A" designates inputs assigned to Auto-Mix. Blue dot shows which inputs are "open"

Store/Recalling a Home Screen

Two home screens can be "parked" so they can be toggled between.

- To store a configuration under the COM key, press and hold the MENU knob, and press the COM key. Every time the COM key is pressed, the next screen in sequence is displayed. When the desired screen is displayed, release the menu knob.
- Repeat the process with the SLT key.
- To return to the saved COM key setting, press the menu knob and COM key together.
- To return to the saved SLT key position, press the menu knob and SLT key together.

Home Screen Explained



Transport Status

Shows the mode of recorder **RECORD**, **PLAY** or **STOP**.

MP3 Indicator

Displays if the recorded files are being marked to be written as an MP3 file.

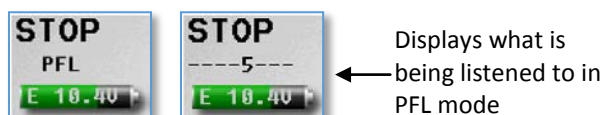
Time Code

Shows the current time code. Please note the time code display is user adjustable to show either the time code from Nomads time code generator or the time code off the card.

Headphone Selection

Displays which headphone matrix is being monitored. Each matrix can be custom named - see headphone naming in the ENG menu.

- If the PFL key is pressed, the name in the Headphone Monitor field is replaced with "PFL" alternating with the selected channel number(s) as follows:



- Pressing the multi-function key corresponding to input to select a channel to PFL. To listen to multiple channels at the same time, just press and hold an additional multi-function key for approximately 1 second to add that channel to the PFL circuit.
- Press the headphone knob to restore normal headphone monitoring.

Battery Indicator

Displays the power source (I - Internal / E - External), a numeric display of the current voltage. Nomad will always automatically switch to the higher voltage source first.

Save Indicator

A moving pixel on bottom of screen moving right to left indicates that the Nomad is saving a parameter setting to its memory. If Nomad is powered down while the pixel is moving the settings will not be saved.

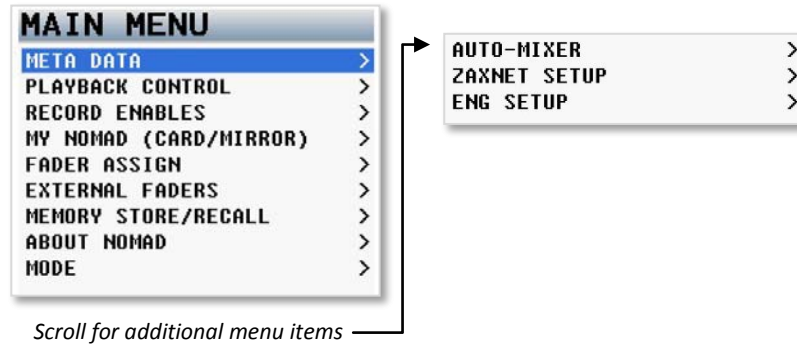
Card Information Field

- Top Line - Displays space available on the primary and mirror card.
- Second Line - Mirror file progress displays what percentage of mirroring is done.
- Third Line - This line will alternate between:
 - When Nomad is not recording:
 - Mirror status
 - Time left on the primary card.
 - When Nomad is recording:
 - Segment number and total running time of current take being recorded
 - Segment number - with elapsed time of the take.
 - Scene and take.

Main Menu

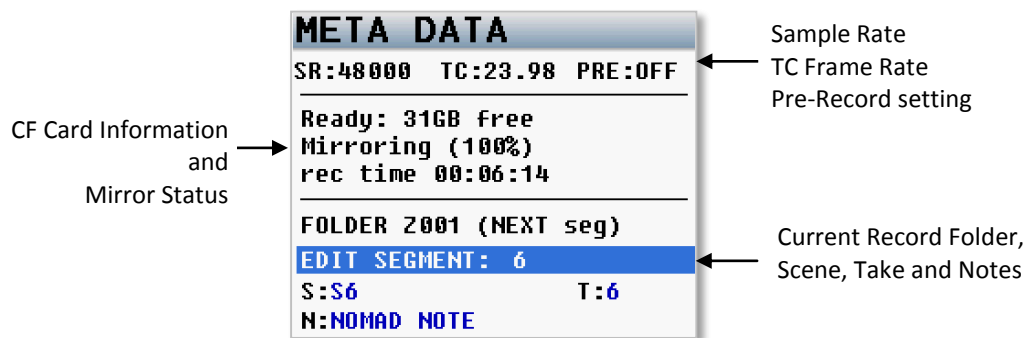
To access the main menu press the menu knob. If Nomad is in the ENG home screen and the virtual fader mode is turned on, press and hold the menu knob for 1.5 seconds to enter the main menu.

When in the main menu scroll the menu knob to highlight a menu item and press the menu knob to enter the sub menus for that item.



Metadata Menu

This menu is where the metadata for a take is entered. The metadata menu can also be quickly accessed by pressing the AMIX key when the AutoMixer is turned off.



Entering Metadata

Using the menu knob select and highlight one of the data fields then press the menu knob to open the keyboard. Metadata can be edited and / or changed before Nomad starts recording a file or even while Nomad is recording as the metadata is written before the file is closed. If in continuous mirror mode and changes to the metadata are made after stop is pressed the file will need to be re-mirrored for the changes in the metadata to be reflected in the mirror file.

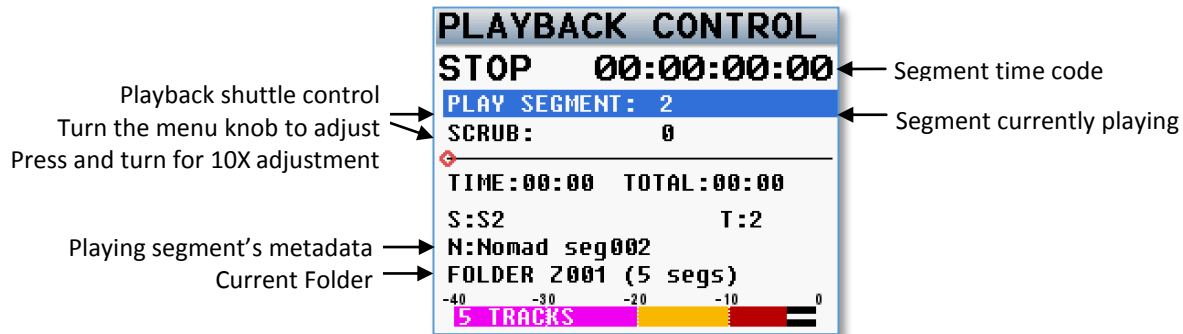
Nomad allows for a preset list of notes that can be created and recalled.

Select and enter from the preset list of notes

1. Highlight the note field.
2. Press the PFL button.
3. Select the preset note.
4. Press the menu knob.

Playback Control Menu

This menu is where the playback of recorded files is controlled from.



Please note when in this menu, the STOP key and PLAY key function immediately, even if the transport keys are set to shifted mode.

Primary Card Record Routing - *Nomad Lite Only*

The primary card record routing in Nomad Lite is slightly different from the card routing in Nomad 10 or 12 as that Nomad Lite does not have a record enable matrix or a card routing matrix.

Just as with Nomad 10 and 12 all inputs and record busses can be routed to any record track. Please note all ISO tracks are recorded pre-fade only and all output busses are recorded post-fade.

Record Routing

In Nomad Lite record routing menu select and highlight a card track.
After the track is highlighted scroll through and choose the source to be assign and record on that track.

RECORD ROUTING	
CARD1	Input 1
CARD2	Input 2
CARD3	Out 1
CARD4	Out 2
CARD5	(OFF)
CARD6	(OFF)
CARD7	(OFF)
CARD8	(OFF)
CARD9	(OFF)

Shows Card Tracks 1 and 2 will record inputs 1 and 2 and tracks 3 and 4 will record Output

Mirror Record Enables - *Nomad Lite Only*

The mirror record matrix sets which of the primary tracks are copied on Nomad Lite mirror compact flash card.

Enabling Mirror Tracks

To select a track to mirror simply enable a cross point in the appropriate box.

Please note that it is not necessary to remove any cross points from the mirror matrix because if a primary card track is set to off in the record routing menu nothing will be recorded on the primary card and therefore nothing will be written to the mirror card. This way all of the mirror tracks can be enabled at all times making it unnecessary to change the tracks being mirrored every time the record routing is changed

MIRROR ENABLES							
1	2	3	4	5	6	7	8
X	X	X	X				
							MIR

Record Enables - *Nomad 10 and 12*

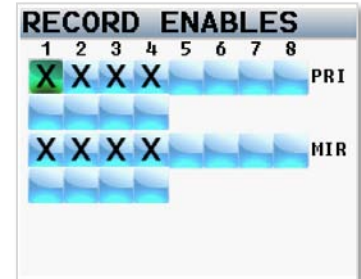
The record enable matrix in Nomad 10 and 12 selects which tracks are enabled and recorded on the primary and mirror compact flash cards.

Please Note if the sample-rate is set to 88.2 kHz or 96 kHz, only eight primary and mirror tracks can be selected and recorded.

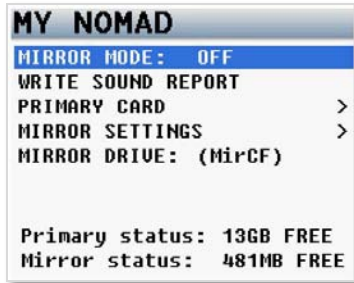
Record Enables

To enable primary or mirror tracks simply enable a cross point in the appropriate primary or mirror box.

Please note that it is not necessary to remove any cross points from the mirror matrix because if a primary card track is not enabled nothing will be recorded on the primary card and therefore nothing will be written to the mirror card for that track. This way all of the mirror tracks can be enabled at all times making it unnecessary to change the tracks being mirrored every time the primary card enables are changed.



My Nomad Menu



The My Nomad menu sets the parameters of the primary recording and mirroring functions of Nomad.

Please note that Nomad will automatically create a new file when the file size reaches 2GB. This will be a seamless transmission with no loss of audio. The take number will add the letter a letter for each time Nomad creates a new file. So for example if the first take is over 2GB the take numbers would be Take1 and Take 1a.

Mirror Mode Options

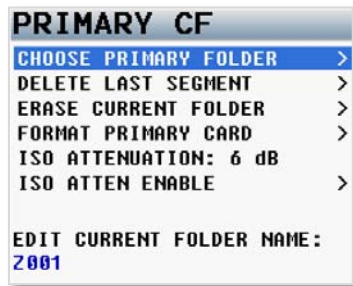
- **OFF** - Nomad will not mirror any files.
- **ON** - Nomad will only start to mirror a file once the unit has gone into stop mode.
- **CONTINUOUS** - When Nomad is recording, the audio is copied to the mirror card immediately after it is written to the primary card. Depending on the track count, the mirror card may lag behind a bit.

Please note if mirroring is lagging too much many times there are items that are on and not needed. These items will divert processing power from the mirroring and can often be shut off to conserve the processing power and speed up mirroring. Check to see that some of these items are not unnecessarily on: bus assignments cross points, compressor enables (input, output and card), high pass filters, notch filters, and delays.

Write Sound Report

When write sound report is selected, Nomad will create a sound report of the recorded files within the current folder and write the report to the mirror CF card. The sound report contains the metadata information for those files. Please note to write a sound report mirror mode must be set to OFF.

Primary Compact Flash Card Menu



The primary compact flash menu sets the parameters of the primary record card is adjusted.

Choose Primary Folder

All files are recorded into individual folders. The primary folder menu is where the folder to be recorded to is chosen. To select a folder scroll the MENU knob to highlight a folder then press the MENU knob to select. At that point the green check will indicate the folder that will be recorded to.

Please note that mirror mode needs to be set to OFF before the primary folder can be changed.

PRIMARY FOLDER		
FOLDER	SIZE	SEGS
Z001	221 GB	5 ✓
Z002	17 GB	3
Z003	0 MB	0
Z004	0 MB	0
Z005	0 MB	0
Z006	0 MB	0
Z007	0 MB	0
Z008	0 MB	0

Green checkmark indicates which folder receives the recorded audio.

The audio on the primary card is recorded as a Zaxcom MARF file. The advantage of MARF is that if there is a power loss or any other issue while recording there will not be any loss of recorded audio, as is common with all other portable recording systems.

In the event of a power loss while recording: at power-up, Nomad will automatically close any open files to the point the audio recording was interrupted with no loss of audio up to that point. Even though Nomad uses a proprietary file system, it is 100% compatible with Mac or PC by using the free file conversion utility ZaxConvert. The latest version can be downloaded from www.zaxcom.com. All MARF files can be converted to either a WAV or MP3 files.

Delete Last Primary Segment

Delete last segment will delete the last recorded segment.
To delete the segment press the star key.



Erase Current Primary Folder

Erase current folder deletes the entire folder from the compact flash card.

WARNING: If a folder has been mirrored, remove the mirror card before erasing. If not, the folder will be erased from both the primary and mirror card.



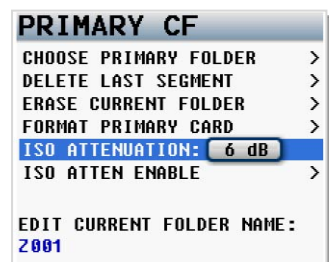
Format Primary Card

This is where the primary CF card is formatted. This process will take about 4 minutes to complete.



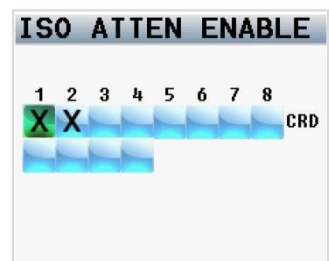
ISO Attenuation

The NeverClip™ inputs allow large signals to travel through the digital mixing engine using 32 bit floating point numbers. Once these large signals are recorded into a 24-bit WAV (or MARF) file, the advantage of floating point math is lost and these signals can clip if not using a card limiter. ISO Attenuation allows the ISO record tracks to be attenuated by a user selectable amount of 6, 12, 18 or 24 dB. This allows audio to be recorded unclipped even if its dynamic range would normally be too large. This gain reduction is stored in the metadata of the WAV file so post production can restore the amplitude of the ISO tracks when necessary.



ISO Attenuation Enable

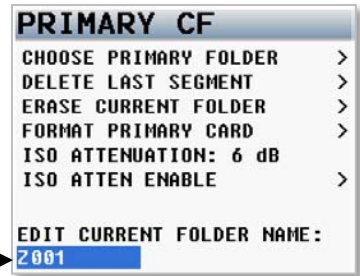
The ISO attenuation matrix allows which card record tracks will be attenuate when the ISO attenuation has been enabled.



Edit Current Folder Name

Each record folder can be named to identify its contents. A folder name can be up to 19 characters.

Current folder name →

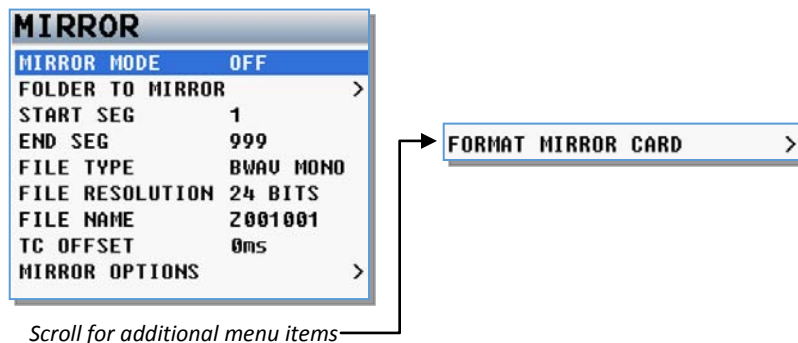


Editing a Folder Name

1. Scroll down to the Edit Current Folder Name.
2. Press the MENU knob to highlight the folder name and to access the enter text menu.
3. Name the folder keeping in mind that the folder name needs to be seven characters or less, and cannot contain spaces or symbols.

Mirror Settings Menu

The mirror menu controls the copying of the audio files from primary compact flash card to the mirror compact flash card. The mirror compact flash card is formatted as FAT32, is fully compatible with all Mac & PC platforms and is generally used as a deliverable format to post since the mirrored files will be recorded as BWAV files.



Mirror Mode

- **OFF** - Nomad will not mirror any files.
- **ON** - Nomad will only start to mirror a file once the unit has gone into stop mode.
- **CONTINUOUS** - When Nomad is recording, the audio is copied to the mirror card immediately after it is written to the primary card. Depending on the track count, the mirror card may lag behind a bit.

Please note if mirroring is lagging too much many times there are items that are on and not needed. These items will divert processing power from the mirroring and can often be shut off to conserve the processing power and speed up mirroring. Check to see that some of these items are not unnecessarily on: bus assignments cross points, compressor enables (input, output and card), high pass filters, notch filters, and delays.

Folder to Mirror

The folder to mirror menu specifies which folder the audio will be mirrored (copied) to. For continuous mirror, this folder needs to match the primary folder.

Start Segment

The start segment number will be the first segment that Nomad will mirror or re-mirror. When recording the start segment will automatically increase with each file on the primary card.

End Segment

The end segment number will be the last segment that Nomad will mirror or re-mirror.

File Type Select

The file type select sets the file format type Nomad will mirror the audio as.

- **BWAV MONO**
- **BWAV POLY**
- **MP3** - only available with a Nomad 12

A BWAV MONO file is 1 file per track. So if only 1 track is recorded, 1 file will represent that "take" from the time record is pressed to the time stop is pressed. If 2 tracks were to be recorded 2 tracks, Nomad will produce 2 files, one representing track 1 and the other representing track 2.

A BWAV POLY file creates one file for that take; even if the take was recorded has multiple tracks. So with a POLY file if a take is only 1 track, the file would be 1 track. If the take was 2 tracks, it would still be one file with both tracks. This is often referred to as being "2 tracks wide". Similarly, if 6 tracks were recorded it would still be only one file, 6 tracks wide.

File Resolution Select

The file resolution sets the bit depth that Nomad will mirror the files at. Nomad can record files as 16 bit or 24 bit.

File Naming Protocol

File naming sets the way the individual files are named.

- **Z001001** - Creates a file name in the format of - **Folder Name** and **Segment Number**.
This is the default file naming protocol where the file name consists of the Folder Name (Z001 or whatever name was created) followed by the Segment Number (for example 045) so the file name would be Z001045.WAV (folder name / file number) that would be followed by Z001046WAV.
 - **1 T2 Z001** - Creates a file name in the format of - **Scene, Take, Folder Name** and **Segment Number**.
For example scene "1", Take "2" in folder "Z001" and the segment number is "45", the file name will be "1_T2_Z001045.WAV". Warning - when using this naming option do not create a scene or take with any characters other than letters or numbers.
 - **1 T2** - Creates a file name in the format of - **Scene** and **Take** separated by and underscore.
For example scene "1", Take "2" in folder "Z001" and the segment number is "45", the file name will be "1_T2.WAV". Warning when using this naming option avoid creating duplicate file names within a folder, if duplicate file names are created the files will not mirror properly.
 - **1T2** - Creates a file name in the format of - **Scene** and **Take** with no separation.
For example scene "1", Take "2" in folder "Z001" and the segment number is "45", the file name will be "1T2.WAV". Warning when using this naming option avoid creating duplicate file names within a folder, if duplicate file names are created the files will not mirror properly.
- Please note that all segment numbers will be a three digit number. The first file in a folder will always be 001.

Mirror Options

Remember mirror options after power cycle allows Nomad to stay in the last mirror mode setting before being powered off. If this option is set to OFF, any time Nomad is powered down the mirror mode will default to OFF and will need to be turned back on. Please note that even if Nomad is setup to allow mirroring mode to be remembered after a power cycle if a CF card is not installed in the mirror slot after the unit boots-up - mirror mode will be turned off and must be manually turned on after a mirror card is inserted.

Time Code Offset

The time code offset is used to create an offset for the mirror files. An offset can be from -500ms to +500ms in 1ms increments.

Format Mirror Card

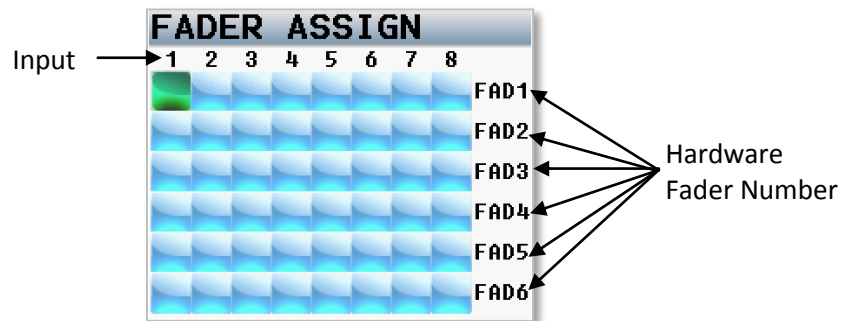
This is where the mirror compact flash card is formatted. Nomad will format the card as a FAT32 format.

Mirror Drive Select - *Nomad 12 Only*

This menu will select if Nomad will mirror to its internal compact flash drive or to the USB drive. If set to mirror to USB Nomad will mirror to a drive plugged into the USB port on the side of a Nomad 12.

Fader Assign Matrix

The fader assign matrix controls which inputs are assigned to the six hardware faders. Because Nomad is a digital mixer, no actual audio is going through the Nomad fader controls allowing for complete flexibility for the hardware faders. Any fader can be assigned to control analog inputs 1-8, digital inputs 1-8, analog trim or ZaxNet trim in any order or combination.



Setting a Cross point

Rotate the menu knob to scroll through the matrix. At the intersection of the input and fader press the menu knob to cycle through the available cross points, which are:

- Blank - no connection.
- **A** - Assigns an analog input to a fader.
- **D** - Assigns a digital input to a fader.
- **T** - Assigns the fader to work as a hardware trim knob. Please note to access the trim mode press the STAR key when in this matrix. That will add the "T" option to the cycle
- **Z** - Assigns the fader to control the gain of a Zaxcom wireless transmitter. Please note that a Z can only be assigned when ZaxNet is in transmit mode.

Please note when using a multiple-element microphone (i.e., stereo, surround, etc.) and assigning channels to one master fader AutoTrim will need to be disabled.

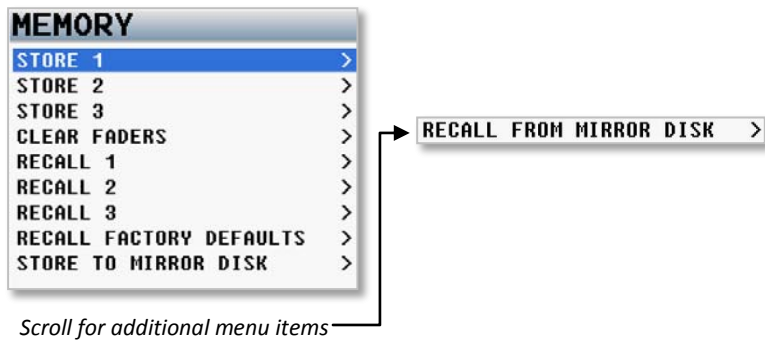
External Fader Assign

The external fader assign sets the function of each individual fader on the FP8, Mix8 and Oasis control surface. Each fader is user assignable as an analog or digital fader, a TRX transmitter gain control, or an input trim controller. Any combination of assignments can be made.

The external fader menu allows for three fader bank assignments to be created for the Oasis, the bank assignment can be used for the FP8 or Mix8 as a fader assign preset as well. But please note that since the FP8 and Mix8 are not motion controlled the fader position will jump when changing fader banks.

EXT FADERS	
EXT FADER 1	(OFF)
EXT FADER 2	(OFF)
EXT FADER 3	(OFF)
EXT FADER 4	(OFF)
EXT FADER 5	(OFF)
EXT FADER 6	(OFF)
EXT FADER 7	(OFF)
EXT FADER 8	(OFF)
Fader Bank	Bank 1

Memory Menu



Store / Recall Memory

From the store and recall positions, Nomad can save and recall three full recorder setups for different work scenarios. All user set parameters are saved and can be recalled as needed. Please note that after doing a factory restore, all stored memories will be erased.

Clear Fader Assigns

Selecting clear faders will clear all of the current fader assignments.

Factory Reset to Default

Recall factory defaults resets all of Nomads parameters back to the factory settings. If a factory reset is done, all user setting, with the exception of note and track preset names, will be lost and have to be re-imputed. To do a full restore, including note and track names, hold the stop key on boot up. It is advised to do a factory reset when updating software or if Nomad is exhibiting odd behavior.

Store / Recall to Mirror Card

Nomad has the option to save settings to (and restore settings from) the mirror compact flash card. This allows settings to be exchanged between multiple Nomads.

About Nomad Menu

This menu provides information about your Nomad

ABOUT NOMAD

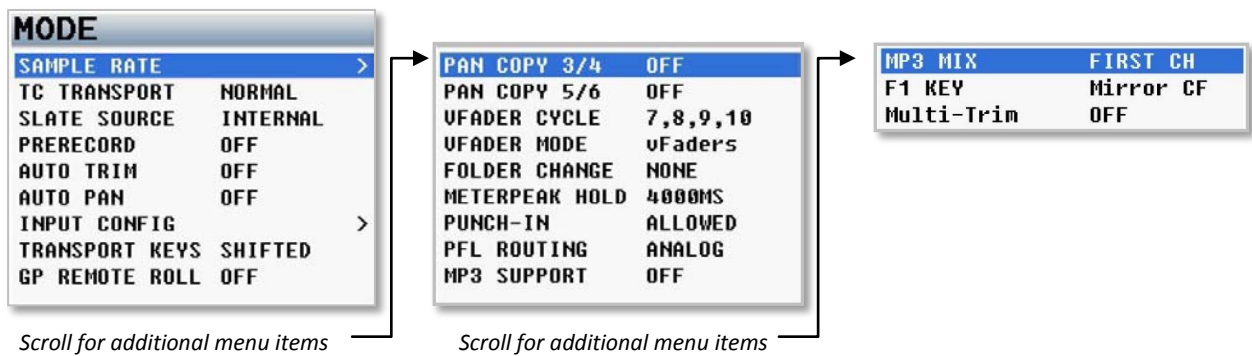
MODEL	Nomad 12
SERIAL NUMBER	01234
SOFTWARE VER	v4.16
DSP REV	B
AUDIO REV	13
MAIN REV	56
ZAXNET VER	0.33
CPU USAGE	57%

← Software Version

← ZaxNet Software Version

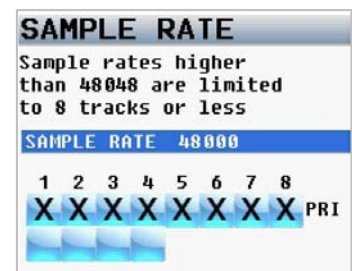
← Indicates current CPU usage. Normal operations should be between 55 - 80%

Mode Menu



Sample Rate Select

Nomad can record the following sample-rates: 44100, 47952, 48000, 48048, 88200, and 96000. Please note when recording sample rates of 48048 or higher there is a limitation of 8 tracks or less. The sample rate select menu has a matrix that allows for record tracks to be enabled or disabled.



TC Transport

Time code transport adjusts the way Nomad will go into record mode.

- **Normal** - Nomad will go into record when the record button is pushed.
- **Auto Load** - Nomad will go into to record when it senses record run time code coming from an external source.

Slate Source Select

Selects if internal slate microphone, located on the front panel of Nomad, or an external slate microphone that is connected to the external slate microphone input jack on the side of Nomad - will be used when the SLT key is pressed.

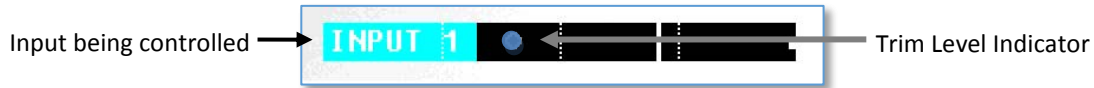
Prerecord

From the point the Nomad is powered up, all inputted audio is being processed. When prerecord is enabled, up to 10 seconds of that processed audio is held in a prerecord buffer. Then when the record key is pressed that stored audio, with its time code, is included the current take.

Please note the prerecord buffer is dumped after any of the following settings are changed: sample-rate, time code, user-bits, frame-rate or track count. After these parameters are changed the buffer will start to re-build. Also note that prerecord is only available when the sample is set to 48048 or lower. In addition using prerecord does not consume any additional battery power.

AutoTrim

AutoTrim is a feature that makes the menu knob act an individual trim knob for all analog inputs. When AutoTrim is turned on and a fader is adjusted the blue LED next to that fader will illuminate indicating the input routed to that fader will be trimmed when rotating the menu knob. When another fader is nudged, the trim function will move to that input.



AutoPan

AutoPan is a feature that causes the COM key act as a pan knob. When AutoPan is turned on and a fader is adjusted the blue LED next to that fader will illuminate indicating the input routed to that fader will be panned when the COM key is pressed. AutoPan is active from any meter screen.

When pressing the COM key the panning for the illuminated channel will cycle from left to center to right to blank - unless "Prevent Empty Pan" is turned ON in the ENG advanced menu - then the blank option will not be cycled through.

When panning with AutoPan the headphone display will temporally display which position that input is panned to L = Left C= Center R= Right

Input Configure Set

The Input Configuration menu is used to select between AES inputs and other Nomad resources such as ZaxNet returns inputs analog input 5 and 6 and NeverClip. Put simply, for Nomad's processors to handle the additional AES channels, other input sources or ZaxNet may need to be deactivated.

Fifteen selections are provided to allow various combinations of AES inputs, return inputs, analog input 5/6, NeverClip and IFB.

Please note when using ZaxNet the input configuration must be set to 8 or higher.

If the Input Configuration is changed, Nomad will need to be rebooted.

INPUT CONFIGURE		
INPUT TYPE	0	
AES 1,2	ON	
AES 3,4	OFF	
AES 5,6	OFF	
AES 7,8	OFF	
Ret 1,2	ON	
Ret 3,4	ON	
Analog 5,6	ON	REBOOT REQUIRED
IFB Input	OFF	

INPUT TYPE	AES INPUT 1/2	AES INPUT 3/4	AES INPUT 5/6	AES INPUT 7/8	RETURN 1/2	RETURN 3/4	ANALOG IN 5/6	ZaxNet ENABLE	NEVER CLIP INPUTS
0	ON	OFF	OFF	OFF	ON	ON	ON	OFF	ALL
1	OFF	ON	OFF	OFF	ON	ON	ON	OFF	ALL
2	OFF	OFF	ON	OFF	ON	ON	ON	OFF	ALL
3	OFF	OFF	OFF	ON	ON	ON	ON	OFF	ALL
4	ON	ON	OFF	OFF	ON	OFF	ON	OFF	ALL
5	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ALL
6	ON	OFF	OFF	ON	ON	OFF	ON	OFF	ALL
7	ON	ON	ON	ON	ON	OFF	OFF	OFF	ALL
8	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ALL
9	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ALL
10	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ALL
11	OFF	OFF	OFF	ON	ON	OFF	ON	ON	ALL
12	ON	OFF	OFF	OFF	ON	OFF	ON	ON	ALL
13	ON	ON	ON	ON	OFF	OFF	ON	ON	1 & 2
14	ON	ON	ON	ON	ON	OFF	OFF	ON	1 & 2
15	OFF	ON	ON	ON	ON	OFF	OFF	ON	ALL

Transport Keys

There are two ways that the multi-function keys can be set to control the way Nomad will go into record, stop and playback.

Shifted Mode

If the transport key is set to shifted mode and the TC, A-MIX or ZNET key is pressed the menu associated with those keys will open. When set to shifted mode to go into record, playback or stop, the keys will need to be shifted. To shift the keys press the MENU knob while simultaneously pressing the REC, PLAY or STOP key. While in shifted mode it is still possible to directly go into record, play and stop with a single key press by pressing and holding the key for 1.5 seconds.

Unshifted Mode

If the transport key is set to unshifted mode and the REC, PLAY or STOP keys are pressed Nomad will go into record, playback or stop. In unshifted mode to display the TC, A-MIX or ZNET menus, it is necessary to press the menu knob while pressing the TC, A-MIX or ZNET key.

GP Remote Roll Enable

Turning on the remote roll will allow Nomad to use a remote switch to start and stop recording.

To operate a toggle switch will need to be connected to the serial port on Nomad - not to the USB port. For pin configuration please see the connector assignments in the back of this manual. Please note that the GPI remote roll cannot be used at the same time as an Oasis control panel, Mix 8 / 12 or FP8 fader panel.

Pan Copy

When using the ENG home screen pan matrix to assign inputs to output buses 1 and 2 creating a left and right out assign - pan copy gives the option to have output buses 3 / 4 and or buses 5 / 6 follow the same pan selection. So the inputs that are assigned to busses 1 and 2 will automatically be assigned to the busses that are being pan copied. This is useful when feeding the same two bus source to multiple cameras.

VFader Cycle

Virtual fader will allow all 10 analog inputs to be mixed right from the ENG meter screen. The menu knob will become the hardware fader for those inputs.

Please note when VFader mode is active, the menu knob will need to be pressed for 1.5 seconds to access the main menu.

VFader options

- NONE (OFF)
- Input 7 ONLY
- Inputs 7, 8
- Inputs 7, 8, 9
- Inputs 7, 8, 9, 10

MODE	
AUTO TRIM	OFF
AUTO PAN	OFF
INPUT CONFIGURE	>
TRANSPORT KEYS	SHIFTED
GPI REMOTE ROLL	OFF
MIX8	OFF
PAN COPY 3/4	OFF
PAN COPY 5/6	OFF
VFADER CYCLE	7,8,9,10

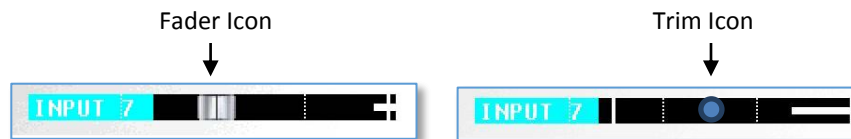
Shows which inputs will be active when the Virtual Fader is activated

VFader Mode

VFader mode choose between fader control only to control the fader only or fader plus trim controls for the inputs that were selected in the VFADER CYCLE menu.

When the virtual fader is active the bottom meter on the ENG Meter Screen will display what will be controlled. Either fader only or fader and trim.

MODE	
AUTO PAN	OFF
INPUT CONFIGURE	>
TRANSPORT KEYS	SHIFTED
GPI REMOTE ROLL	OFF
MIX8	OFF
PAN COPY 3/4	OFF
PAN COPY 5/6	OFF
VFADER CYCLE	7,8,9,10
VFADER MODE	vFad+Trim



Virtual fader mode is only active while in the ENG meter Screen.

To control inputs 7 - 10

- Press the MENU knob and the bottom meter on the ENG meter screen will display what input will be controlled.
- If the fader icon is displayed the MENU knob will adjust the mix for that input.
- If the blue trim icon is displayed the MENU knob will control the input trim of that input.

Folder Change

If AutoChange is selected and the primary folder is changed, the mirror folder will change to the same folder. If folder change is not enabled than the mirror folder will need to be manually changed,

MODE	
INPUT CONFIGURE	>
TRANSPORT KEYS	SHIFTED
GPI REMOTE ROLL	OFF
MIX8	OFF
PAN COPY 3/4	OFF
PAN COPY 5/6	OFF
VFADER CYCLE	7,8,9,10
VFADER MODE	vFad+Trim
FOLDER CHANGE	AutoChange

Meter Peak Hold Set

Meter peak hold sets the duration the peak indicator (white vertical bar within the meter) is held after the audio hits that peak. The range is 400MS to 8000MS with a step value of 200MS.

MODE	
TRANSPORT KEYS	SHIFTED
GPI REMOTE ROLL	OFF
MIX8	OFF
PAN COPY 3/4	OFF
PAN COPY 5/6	OFF
VFADER CYCLE	7,8,9,10
VFADER MODE	vFad+Trim
FOLDER CHANGE	AutoChange
METER PEAK HOLD	4400MS

Punch-In

Punch-in gives the ability to start a new segment while recording. If punch-in is ALLOWED, pressing (or press holding) the REC key (depending if Nomad is in shifted or un-shifted mode) will create a new file. If it is DISABLED, a new file cannot be created while recording.

If the Rec/Stop warning option is enabled there will be an audible beep when a new file is created. The beep is heard in the main headphones only and is not sent to the record tracks or output busses. Note regardless of this setting Nomad will create a new file when the current file reaches 2GB.

MODE	
GPI REMOTE ROLL	OFF
MIX8	OFF
PAN COPY 3/4	OFF
PAN COPY 5/6	OFF
VFADER CYCLE	7,8,9,10
VFADER MODE	vFaders
FOLDER CHANGE	NONE
METER PEAK HOLD	4000MS
PUNCH-IN	ALLOWED

PFL Routing

Pre fader listen routing assigns what will be heard to when the PFL key is pushed.

- **FADER** - PFL follows what is assigned in the fader assign matrix including.
- **ANALOG** - PFL corresponds to analog input. So for example analog input 1 will be PFL 1 and analog input will be PFL 2.

MP3 Support

Turning on MP3 support will allow Nomad to create MP3 files. The files can be 64, 96 or 128Kbps.

To record MP3 files the primary card will need to be format with the MP3 support turned on to create an MP3 folder on the card. MP3 files can be 64, 96 or 128Kbps. This folder will hold up to 24 hours of MP3 audio (at 64kbps). Please note that after the folder has been filled, the MP3 audio will write over the oldest audio.

Please note if MP3 support is turned on and the primary card was not formatted with MP3 support turned on, Nomad will not know where to write the MP3 files to and “???” error will be displayed where the MP3 indicator is on the meter screen.

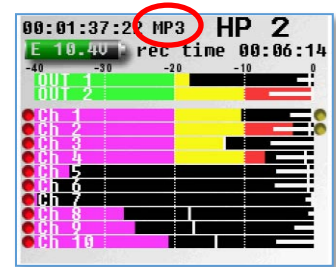
After the primary card is formatted with MP3 support turned on leave MP3 support on while recording. When MP3 support is on, MP3 files will be written to the MP3 folder on the primary card. When recording make sure the file is marked for MP3.

To “mark” the file make sure that MP3 is toggled on before the file is closed (stop recording) the primary file. When MP3 is toggled on when “MP3” appears in the home meter screen while recording. All marked files will be mirrored as an MP3 later.

If MP3 support is enabled all files will be “marked” by default. To toggle off MP3 for a particular file press the A-MIX key before or while recording.

Please note that after the file is closed the file can still be marked by going to the metadata menu and select the file by pressing the STAR key, “MP3” will be displayed for that file.

When done, to transfer the MP3 file from the primary card to a USB device or mirror compact flash card. Go to My Nomad > Mirror Settings > File Type and select MP3. Then when mirror mode is turned on Nomad will start writing the MP3 files to the selected mirror drive. The file transfer is quick - a 30 minute file will transfer in about 8 seconds.



MP3 Mix

The MP3 mix menu selects which record tracks Nomad will create MP3 of.

- **FIRST CH** - Selects the first record enabled track.
- **LAST CH** - Selects the last record enabled track.
- **FIRST TWO** - Selects the first two record enabled tracks.
- **LAST TWO** - Selects the last two record enabled tracks.

Please note that if “FIRST” or “LAST” is selected that will be the first or last track that is record enabled in the primary record enable matrix. So for example if primary tracks 1, 4, 6, 8, 10 are being recorded and FIRST TWO in the MP3 MIX is selected the MP3 will be that of tracks 1 and 4 if LAST TWO is chosen the MP3 will be of tracks 8 and 10.

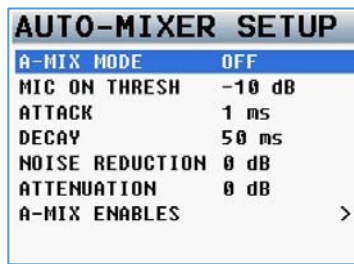
F1 Key

This menu sets the function on the F1 key on the FP8 fader panel.

The F1 key can be assigned as a shortcut key to the Metadata page, Record Enable matrix, Track Naming page, Primary CF menu or Mirror CF menu.

Multi-Trim

Multi-trim allows multiple inputs to be controlled a single trim.

Auto-Mixer - *Not available in Nomad Lite*

A-Mix Mode

Enables Nomads Auto-Mixer and sets if the Auto-Mixer will work pre-fade or post-fade.

- **Pre-Fade** - The Auto-Mixer is inserted before the faders in the audio chain so only the trim control will affect the microphone levels. Since the Auto-Mixer is before the faders the faders have no effect on the Auto-Mix levels.
- **Post-Fade** - The Auto-Mixer is inserted after the faders in the audio chain and both the trim and the faders will control the levels of the microphones. In post-fade mode a microphone can be pulled out of the mix by lowering the fader and will keep pre-fade ISO tracks unaffected.

Mic On Threshold

Sets the level that a microphone needs to be reached before that microphone opens. When a speaker's microphone reaches the mic on threshold level, as indicated on the input meter, that microphone will open and become part of the mix. The mic on threshold can be set anywhere between -60dB and -10dB

Attack

Sets how fast the microphone ramps up to full level when a speaker starts to talk. Please note that a microphone will engage immediately regardless of the attack setting. The attack can be set anywhere between 1 and 150ms.

Decay

Sets how long a microphone will stay active after the signal has fallen 10dB below the mic on threshold. Decay can be set anywhere between 1 and 150ms.

Noise Reduction

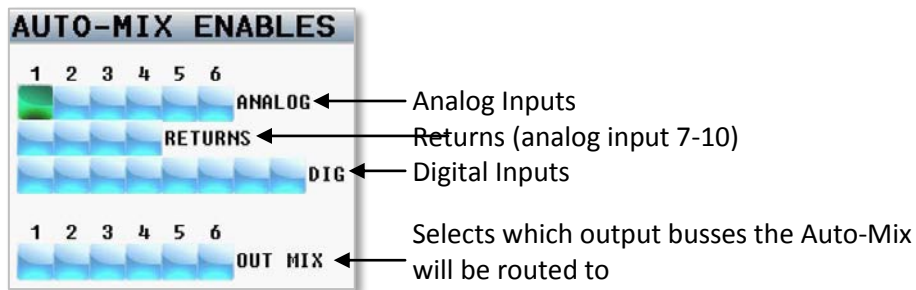
Sets how much the noise floor is attenuated when no one is talking. Noise Reduction can be set anywhere between 0dB and -10dB.

Attenuation

Sets how much each microphone is attenuated when a person stops talking. When a person stops talking that microphone is not closed, the microphone is actually attenuated. The level of attenuation is adjustable here. In some environments it may be more palatable to hear some or most of the ambient microphone noise all the time rather than hear the noise mute and then re-appear when someone talks. Please note that regardless of this setting the last active microphone will always remain open. Attenuation can be set between -10dB and -80dB.

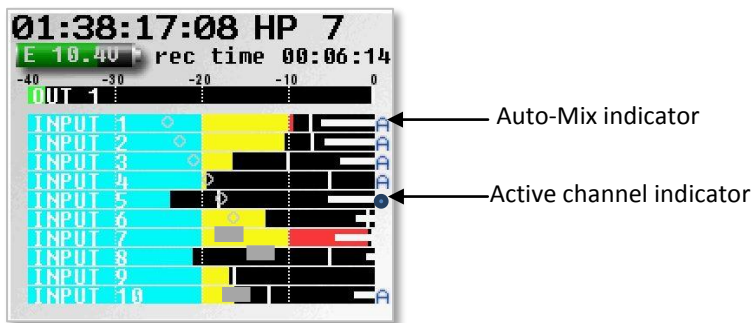
Auto-Mix Enables

The Auto-Mix enable matrix sets which inputs are included in the Auto-Mix. When an input is selected to be included in the Auto-Mix an "A" will be displayed to the right of the input meter on the meter screen. The output buses where the Auto-Mix will be sent to is also selected in this matrix.



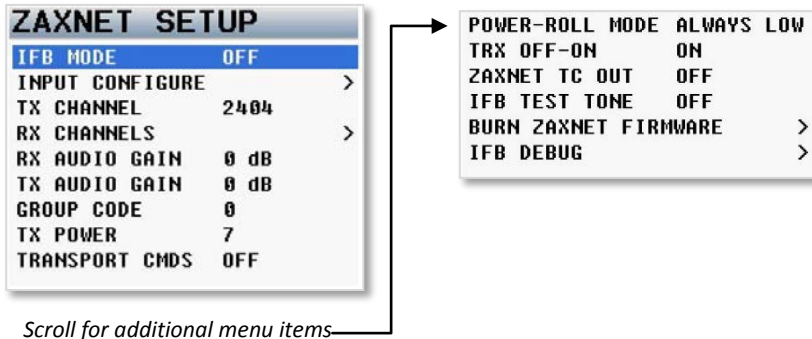
WARNING: When assigning Auto-Mix to an output mix bus that bus should not have any thing assigned to it. If something is assigned to an output bus with the Auto-Mixer that audio will be mixed into the Auto-Mix essentially defeating the Auto-Mixer. To verify that nothing is assigned go to the output bus assign matrix and make sure that nothing is assigned to that bus.

Using the Auto-Mixer



- The Auto-Mixer menu can be accessed from the main menu. After the Auto-Mixer is enabled the menu can be accessed by pressing the A-MIX key on Nomad. Unless MP3 support is turned on, in that case the A-Mix key toggles the MP3 recording marker and the AutoMixer menu will need to be accessed from the main menu.
- After the inputs are assigned to the Auto-Mixer the letter “A” will appear to the right of the input meter for that input.
- When that input is active the “A” will be replaced by a blue dot indicating that the input is being included in the mix. If multiple microphones are opened at the same time Nomad will display a blue dot for each active input.
- If return inputs (7-10) are being used the virtual fader will appear over the meters for those inputs. To adjust the levels on those inputs press the menu knob to highlight that fader. Then rotating the menu knob will adjust the level to that input. To advance to the next fader press the menu knob. Press the Back (headphone) knob to return to normal operations. If any of the virtual fader are being used the menu knob must be held for 1.5 second in order to access the main menu.
- Make sure all bus routing is cleared for bus that the Auto-Mixer is routed to. This will prevent unwanted audio from mixing into the bus.
- Please note that Auto - Mix will not be able to differentiate between a speaker’s voice and noise such as a hit to the microphone. So if the noise is louder than the mic on threshold that will open the microphone as well.

ZaxNet Setup Menu



IFB Mode

- OFF - ZaxNet is off.
- RX - The ZaxNet transceiver is set to receive mode. Nomad will be able to receive audio and time code from a ZaxNet transmitter such as a QRX with QIFB.
- TX - The ZaxNet transceiver is set to transmit mode. Nomad will be able to transmit audio, time code and wireless transmitter commands. Please note if IFB mode is set to TX, be sure to attach a ZaxNet antenna. If not, RF can potentially leak into the microphone preamps.
- TX+RX - ZaxNet will stay in transmit mode unless a headphone matrix that has ZaxNet selected is chosen. At that point ZaxNet will automatically go into receive mode.
So for example to monitor return audio from a camera mounted QRX via ZaxNet: set up a headphone matrix and select ZNet in that matrix. Then when that matrix is selected to be listened to ZaxNet will temporarily go out of transmit (TX) mode and go into receive mode (RX) mode to allowing for the return audio to monitored. When changing the headphone select back ZaxNet will go back to transmit mode.

Input Configure

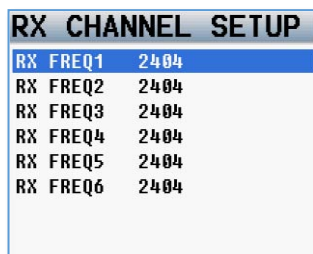
To use ZaxNet the input configure will need to be set to 8 or higher (see - input configure in the mode menu)

TX Channel

This is the frequency that Nomad will use to transmit IFB audio, time code and ZaxNet commands on. The ZaxNet frequency range is from 2.403 to 2.475 GHz. All ERX receivers and TRX transmitters receiving ZaxNet commands will need to be set to this frequency.

RX Channel

This menu is where the ZaxNet IFB receive channel frequencies are set for monitoring. Up to six ZaxNet frequencies can be set.



← When monitoring - the channel numbers will correspond with the 6 headphone selects in the HP setup matrix.
So for example "RX FREQ 1" will be the 1st box in the "ZNET" select in the matrix and "RX FREQ 2" will be the 2nd box.

RX Audio Gain

RX audio gain adjusts the audio level of the signal being received from a QRX IFB.

TX Audio Gain

TX audio gain adjusts the audio level of the IFB transmit audio that will be sent to the ERX receivers.

Group Code

Group code sets the group ID number for Nomads ZaxNet transmitter. ZaxNet uses group codes to allow a specific “group” of transmitters to be controlled. For example, setting Nomad to group code 1 allows Nomad to control all group 1 transmitters. Setting it to 2 allows all group 2 transmitters to be controlled. Group codes can be set from 1 to 99.

TX Power

TX power adjusts the transmit power of the ZaxNet transmitter. The power range is 0 through 7 with 7 being the highest.

Transport Commands

If set to slaved, Zaxcom wireless transmitters that are being controlled via ZaxNet will start/stop recording each time Nomad starts/stops recording.

Power-Roll Mode

Power roll allows the transmitters that are being controlled via ZaxNet to increase its output power level when Nomad goes into record, and decrease to a lower power setting when recording stops. By decreasing the power level when not recording allows the TRX transmitter to conserve the battery. To use Power-Roll the TRX transmitter Power-Roll setting must be set to “Deva Trigger”

- **ALWAYS LOW** - The transmitter will always run at the low power setting.
- **DYNAMIC** - The transmitter will run at low power between takes and automatically go into high power when **Nomad goes into record**.
- **ALWAYS HIGH** - The transmitter will always be run at the high power setting.
-

TRX Off-On

TRX off-on controls the standby state of the TRX wireless transmitter.

- **ON** – The transmitter is fully ON.
- **WAKE UP** – Wakes up any TRX transmitter that has its power up mode set to “Remote Standby”.
- **LOW (OFF)** – disables the RF power amplifier, RF board and mic preamp. This will cut the power consumption and extend the battery life of the TRX transmitters.

Send ERX Delay

Nomad can be set to delay the audio being transmitted to the ERX receivers. This can be useful to dial in an audio delay to sync audio to picture when there is a video processing delay. This setting only delays the audio to the ERX receivers and does not affect any other audio. Please note that this is a global setting meaning that all ERX receivers will receive the same delay.

ZaxNet TC Out

ZaxNet time code out allows ZaxNet commands to be embedded in the time code stream of Nomad's time code output. If ZaxNet time code out is turned on Nomad will output its TRX transmitter commands to a TRX900CL, IFB100/200 or a QIFB instead of using the ZaxNet transmitter that is built-in to Nomad. To accomplish this simply connect the time code out of the Nomad to the time code in on the TRX900CL, IFB100/200 or QIFB. Then the remote commands will be sent to the TRX transmitter via an external ZaxNet transmitter.

IFB Test Tone

IFB test tone turns ON/OFF a test tone that is transmitted on the IFB audio channel to Zaxcom ERX receivers.

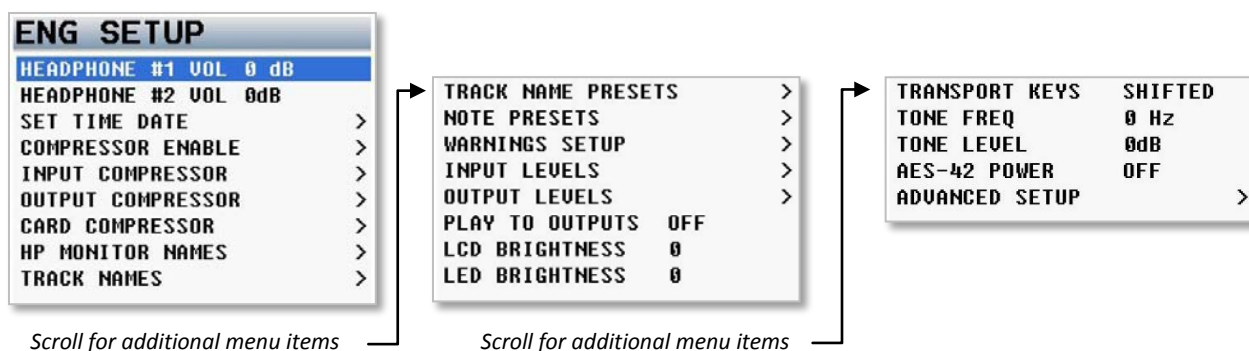
Burn ZaxNet Software

This menu is where Nomads ZaxNet software is updated from. The ZaxNet software is embedded within the Nomad software so no additional software will need to be downloaded. If the ZaxNet software needs to be updated there will be a note in the release notes of the Nomad software.

IFB Debug

This page is used for factory testing of the IFB.

ENG Setup



Headphone 1 Volume

Nomad has 12dB of digital gain that can be sent to the headphone 1 amplifier. This setting will adjust the amount of digital gain that will be added. The recommended setting is 12dB.

Headphone 2 Volume

This menu is where the audio being sent to headphone 2 is adjusted.

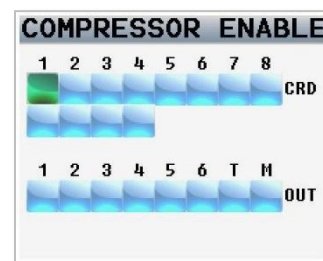
Set Time and Date

The time and date menu is where Nomads internal clock and calendar is set.

From the time code menu Nomads' internal clock can be selected as time of day time code and date can be used as user-bits. Nomads date and time is maintained by an internal battery that keeps accurate time even if Nomad is powered down for an extended time. Nomad has an internal battery used to maintain its clock and calendar. The internal 3 volt CR2320 coin cell battery should last between two to three years,

Compressor Enable

The compressor matrix sets which card tracks, output busses, and if the tape out or mono out will have a compressor / limiters enabled. Placing an X in the matrix will enable the compressor to that card track, output bus and or tape and mono out



Input Compressor Parameter Adjust

This menu sets the parameters for the input compressor. The Input Compressor settings are global, meaning that the settings adjusted here will be the same for all input Channels.

Output Compressor Parameter Adjust

This menu sets the parameters for the output compressor settings. The output compressor settings are global, meaning that the settings adjusted here will be the same for all output busses. The parameter for the output compressors allows for makeup gain to be added.

Card Compressor Parameters

This menu sets the parameters for the card compressor settings. The card compressor settings are global, meaning that the settings adjusted here will be the same for all card tracks. The parameter for the card compressors allows makeup gain to be added.

Monitor Names

The monitor naming menu is where the headphone monitor names that appear in the home screens are set. To create a monitor name click on the HP number this will open the keyboard. Then use the keyboard to enter the name can be entered from. When finished entering press and hold the menu knob or click OK.

Please note if a headphone name labeled “PLAY” is created when Nomad is in playback mode the headphone select will automatically jump to PLAY preset, when stop is pressed Nomad will automatically return to the last preset that was being listening to.

Track Names

The track names are then displayed within the card meters and are contained in the files metadata so post can easily identify the source of a recorded track. To name a track select a track number and press the menu knob to open the keyboard menu. To select from a preset track name press the PFL key to open the present track list.

To select from the list of preset names:

1. In the track name menu highlight the track to name by rotating the menu knob.
2. Press the PFL key.
3. Scroll to the preset name to be entered.
4. Press the menu knob.

Track Name Preset Edit

This menu is where the preset track names are entered. There are 20 track name presets available. Existing names can be edited and new track names can be created. Each track name can be up to 22 characters long.

Note Presets Edit

This menu is where the preset notes are entered. There are 20 note presets available. Existing notes can edited and new notes names can be created. Each note can be up to 22 characters long.

Warnings Setup

The warning setup menu manages the alerts that are pop up on the LCD screen and audible alert sent to the main headphones. After a warning is displayed, press the headphone knob to acknowledge and dismiss the warning. Please note that there are separate user adjustable voltage cutoff for both internal and external batteries – if internal batteries are not being used it is recommended to turn the battery warning off

WARNINGS SETUP		
INT BATT WARNING		OFF
INT BATT THRESHOLD		5.5V
EXT BATT WARNING		OFF
EXT BATT THRESHOLD		10.5V
HP BEEP LOUDNESS		20
HP BEEP BATTERY		OFF
HP BEEP LOW DISK		OFF
HP BEEP REC/STOP		OFF

Input Levels Adjust

This menu manages the audio input levels for the internal slate, external slate, camera returns and digital inputs.

Internal & External Slate Levels

This is where the internal and external slate microphone levels are adjusted. The levels are independently adjustable in 1 dB steps from -20dB to 30dB. Please note that it is normal for the internal slate to have a slightly higher noise floor

Return 1-4 Input Levels / Line Level Inputs 7-10

This is where the levels of the return / line level inputs are set. The levels are continuously adjustable in 1 dB increments from -20dBu to 30dBu.

Digital Inputs 1-8 Levels

This is where the levels of the digital inputs are set. The levels are continuously adjustable in 1 dB steps from -20dBu to 30dBu.

Extra Input Gain

The extra input gain adds 10dB of digital gain to the analog inputs. The extra input gain is global, meaning that when engaged the gain is applied to all analog XLR inputs.

Output Levels Adjust

This menu manages the output audio levels.

XLR & TA5 Output Bus Levels

Each of the main output can be independently adjusted to one of the following output levels

- 0dBu - Line Level
- -10dBu - Tape / Consumer Level
- -35dBu - Mic Level

Mono & Tape Output Bus Levels

Both the mono and tape outputs are independently in 1 dB steps from -12dBu to 21dBu.

Play to Outputs

Play to outputs allows nomad to play its record track to its output busses.

LCD Brightness

This menu is where the brightness of the LCD screen is set.

LED Brightness

This menu is where the brightness of Nomad's LEDs is adjusted. Please note this is a global setting meaning that all LED lights will be set to the same brightness.

Transport Keys

There are two ways that the multi-function keys can be set to control the way Nomad will go into record, stop and playback.

Shifted Mode

If the transport key is set to shifted mode and the TC, A-MIX or ZNET key is pressed the menu associated with those keys will open. When set to shifted mode to go into record, playback or stop, the keys will need to be shifted. To shift the keys press the MENU knob while simultaneously pressing the REC, PLAY or STOP key. While in shifted mode it is still possible to directly go into record, play and stop with a single key press by pressing and holding the key for 1.5 seconds.

Unshifted Mode

If the transport key is set to unshifted mode and the REC, PLAY or STOP keys are pressed Nomad will go into record, playback or stop. In unshifted mode to display the TC, A-MIX or ZNET menus, it is necessary to press the MENU knob while pressing the TC, A-MIX or ZNET key.

Tone Frequency Adjust

From the tone frequency adjust menu the frequency of the reference tone can be changed. The tone is adjustable from 20 to 20,000 Hz.

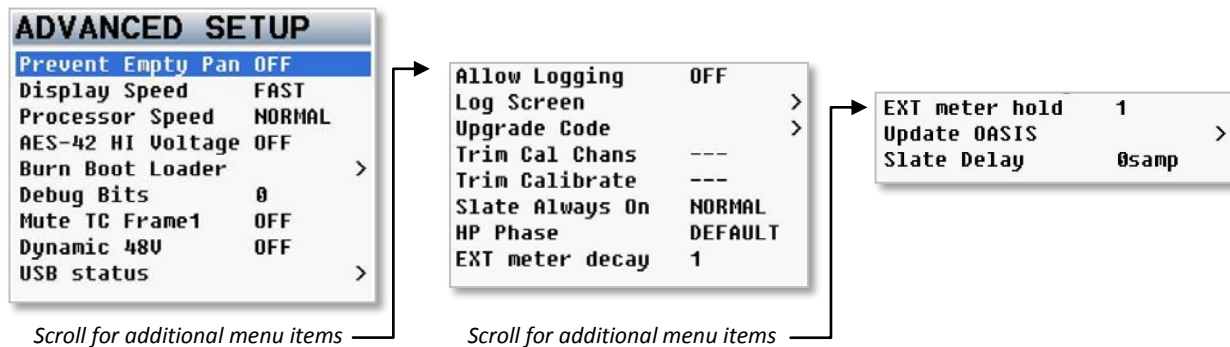
Tone Level

The tone level menu adjusts the output level of reference tone. The range is -90 to 0dB. Please note it is recommended for most applications to keep the tone level set at -20dB

AES-42 Enable

This menu is where power for AES-42 microphones is engaged. AES-42 microphones are on AES 1 and 2 inputs.

Advanced Setup



Prevent Empty Pan

Prevent empty pan removes the blank (no assign) leaving only the L, C, R option while cycling through the panning in the ENG pan matrix or when using AutoPan

Display Speed

The display speed should normally be set to fast. When set to fast the display is updated every frame.

Though when using a lot of effects, cross points and/or are recording at 96 kHz and the user interface is getting hard to use, change the display speed to slow to slow down the refresh rate.

Please note the display speed will automatically go into slow when mirroring or when the unit needs more horsepower for recording.

Processor Speed

The processor speed adjusts the speed of how Nomad records data and mirrors that data. Please note that any change made to the processor speed requires a power cycle to take effect.

- **Normal** - This setting is used for Nomads that have a Main REV of 56 or lower (see the About Nomad menu).
- **Fast 1** - This is the default and recommended setting. If experiencing any crashing or odd behavior change the processor speed to normal.
- **Fast 2** - If experiencing slow mirroring on fast 1 Nomad can be set to fast 2. Please note that before using fast 2 both the primary and mirror cards must be tested in Nomad with the processor speed set to fast 3. To test the cards simply set Nomad to fast 3 and do a test recording for about 15 minutes. During the test if there is any crashing or odd behavior happening change the processor speed to fast 1 and do not use those cards with fast 2. Please use a PC or Mac to insure that all files were mirrored properly and are not corrupted.
- **Fast 3!** - This setting is for testing purposes only.
- **Fast 4!!** - This setting is for testing purposes only and at this point is not recommended.

AES-42 Hi Voltage

This setting turns on the AES-42 high voltage phantom power supply for AES-42 microphones that need the power. This is a global setting for AES-42 microphones. Please note that AES inputs 1 and 2 are available for AES-42 microphones.

Burn Boot loader

The boot loader is part of the software that helps boot up Nomad. Generally the boot loader will not need to be updated. If the boot loader needs to be updated there will be a note released with the software to do so. The boot loader software is already contained within Nomads software.

Debug Bits

Debug bits a factory diagnostic menu and should stay set to 0.

Mute TC 1 Frame

This is for factory debugging and should stay set to off.

Dynamic 48V

Dynamic 48 volts adjusts how Nomad will supply 48 volt phantom power to analog microphones.

- **Off** - 48 volt behavior is normal and 48 volt power is always available.
- **Power Save** - The 48 volt supply is only turned on when one or more input channel have 48V turned on. So if phantom power is not turned on for any of the inputs Nomad will shut off the internal phantom power supply.
- **Auto Kill** - turns off the 48 volt power supply when Nomad is running on a low voltage power source (below 10V) to prevent possible damage to the 48V supply.

USB Status

The USB status page will display if the USB drive on a nomad 12 is functioning.

Allow Logging

Allow logging will turn on the logging feature which will allow Nomad to log warning and error messages which then can be used by the factory to diagnose the unit. The logged messages are displayed on the log screen. Please note if logging is not turned on then Nomad will not log the errors.

Log Screen

The log screen is where Nomad displays the logged errors and warnings.

Upgrade Code

The upgrade code page is used to enter in a factory generated code to upgrade features in Nomad.

To enter the upgrade code use the alpha / numeric multi-function keys.

Warning by randomly entering in code numbers can cause Nomad to lock up.

Trim Calibration Channels / Trim Calibrate

Trim calibration is used to calibrate the analog input trims. Calibrating the input trims will make the 6 XLR trims accurate within +/- 1dB of each other. This is useful in setting up stereo microphones. Once the trims are calibrated there should not be a need to ever re-calibrate.

Please note that Nomad's with a serial number higher than 10688 have already been calibrated at the factory. So it is unlikely that it will ever need to be re-calibrated. If calibration is necessary please see the end of the chapter for step by step calibration directions.

Slate Always On

- **Normal** - This is the typical setting that would be used. With this setting pressing and holding the slate key will activate the slate mic.
- **Forced** - When the slate mic is activated the forced setting locks the slate mic in the on position. To deactivate the slate microphone power cycle Nomad.

Headphone Phase

- **Default** - Main headphone phase is normal.
- **Legacy** - Main headphone phase is inverted.

EXT Meter Decay

This adjusts the decay of the Oasis / Touch meters in milliseconds.

EXT Meter Hold

This adjusts the hold time of the Oasis / Touch meters in milliseconds.

Update Oasis

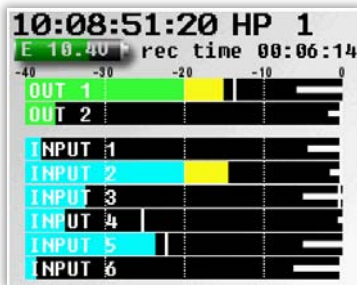
This is used to update the software on an Oasis control surface. Please note when updating the Oasis wait for the star key to stop blinking before powering Nomad or Oasis down. If wither machine is powered down the Oasis will be bricked and will need to be serviced at the factory.

Nomad Input Trim Calibration

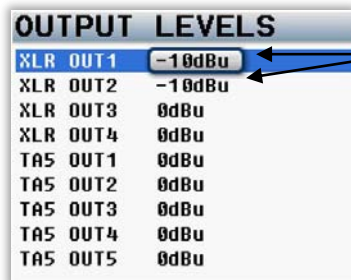
Software version 6.01 and higher adds an Input Trim Calibration for Nomad's 6 XLR inputs. This will allow the input trims to be more accurate and align with each other. Nomads with serial numbers 10688 and higher have already been pre-calibrated at the factory.

CAUTION: If this procedure is not followed exactly it could make the input trims not function correctly and Nomad may not be able to recover normal trim operations and the unit will need to be sent back to the factory to be re-calibrated which will not be covered under warranty. Please follow the instructions and do not perform this operation if in the middle of a job. If running into an issue when calibrating reinstall software version 5.16.

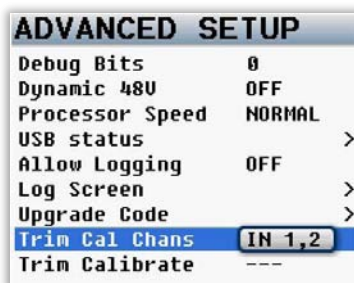
1. Install software version 6.01 or higher on Nomad.
2. Perform a Factory Restore and re-start Nomad.
3. Let Nomad stay powered-up for at least 15 minutes to warm up the input gain circuitry.
4. Select the home screen that contains 2 output meters followed by 6 input meters. If Nomad is not displaying this screen while calibrating the process will fail.



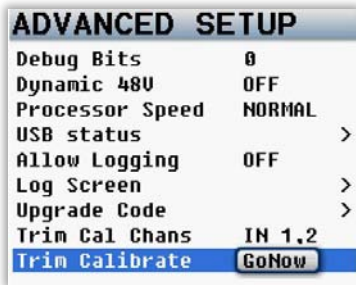
5. Connect a cable from XLR Output 1 to XLR Input 1 and a cable from XLR Output 2 to Input 2. This will cause feedback which is normal.
6. Make sure that Nomad's tone generator is set to -20dB then turn on TONE by holding the TONE button.
7. Adjust XLR Outputs 1 and 2 to -10dBu in the OUTPUT LEVELS menu.



8. Insure the tone level shows up on the input meters
9. From the ENG menu select the Advanced Setup menu and choose IN 1, 2 in the Trim Cal Chans menu.



10. In the Trim Calibrate menu select Go Now.



11. Press the STAR KEY.
12. The Go Now text will change to "---" indicating the Calibration has started.
13. Quickly press BACK (HP) knob to get back to the home screen (the one containing 2 outs and 6 input meters).
14. Let Nomad sit for about 2 to 4 minutes. The levels on the input meters should be creeping up every second as it calibrates the input trim level.
15. Nomad will display "Calibration Complete" message and tone will shut off when the process is done.
16. Cycle power, turn on tone and check to insure the trims work. With Nomad output level still set at -10dBu and the trim set zero the input meter should show the tone at -30dB (plus or minus 1dB).
17. Move the cables to connect Output 1 to XLR input 3 and Output 2 to XLR Input 4.
18. Go to the Advanced Menu choose IN 3, 4 selection in the TRIM CAL CHANS menu and repeat the process 10 through 16.
19. Go to the Advanced Menu choose IN 5, 6 and repeat steps 10 through 16.

When done, if tone is inputted at -20dB (with the output levels set to 0dBu) and the Trim set to 0, the input meters should read close to -20dB.

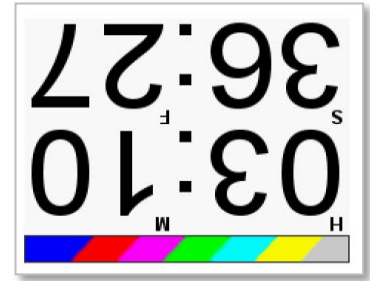
Pressing the Time Code Key

Time Code Slate

Pressing the TC key once opens an inverted visual time code slate.

This is used to provide a visual sync for the camera to match picture and sound.

When the time code slated is displayed pressing the MENU knob will freeze the time code display will freeze and a 1-frame beep tone will be sent to any bus that has tone routed to an output.



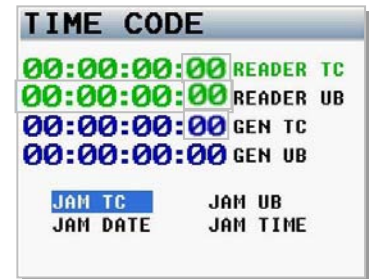
Time Code Jam

Pressing the TC key a second time advances to the time code jam menu.

This page displays time code and user bits that are being received from a source that is connected to the time code in on the BNC connector.

Also displayed are the current running time code and user bits of Nomads internal time code generator.

From this page time code and user bits can be jammed from a connected time code source or jammed from Nomads internal calendar and clock.



- **JAM TC** - Jams Nomads time code from an external source, such as a camera or a master time code unit.
- **JAM UB** - Jams Nomads user bits from an external source, such as a camera or a master time code unit.
- **JAM DATE** - Nomads user bits are created from Nomads internal calendar.
- **JAM TIME** - Time code is created from Nomads internal clock.

Please note that Nomad contains a battery backed real-time clock. This clock is used to maintain running time code and internal calendar. It is advised to change the battery every 2 to 3 years.

The battery is a CR2320 3V coin cell battery.

Enter Time Code

Pressing the TC key a third time advances to the enter time code menu. From this menu the time code and user bits can manually be entered.

Manually entering time code

1. Press the MENU knob to highlight ENTER TC.
2. Rotate the MENU knob to select the desired position.
3. Press the numeric function keys to enter a numeric value.



Manually entering user-bits

1. Press the MENU knob to highlight ENTER UB.
2. Rotate the MENU knob to select the desired position.
3. Each character position can take a hex number (0 - 9, A - F).
4. To enter A - F, double click the number keys 1 - 6.
5. Once the last digit is entered, the user-bits are entered immediately.

Time Code Setup Menu

Pressing the TC key a fourth time opens the time code setup menu

TIME CODE SETUP	
TC MODE	FREE-RUN
TC FRAME RATE	23.98
TC DISPLAYED	GENERATOR
TC OUTPUT	GENERATOR
INCREMENT UBITS	OFF
UB DATE STYLE	EU DDMMYY
AUTO DATE JAM	OFF

TC Mode

- **FREE-RUN** - Time code runs continuously.
- **REC-RUN** - Time code will start to run when Nomad begins to record and will stop when Nomad stops recording.
- **CJAM** - Time code and user bits are continuously updated from a connected external source.
- **CJAM TC** - Time code only is continuously updated from a connected external source.
- **CJAM UB** - User bits only are continuously updated from a connected external source.

TC Frame Rate

From the time code set menu is where Nomad's time code frame-rate is adjusted.

Nomad supports all standard SMPTE frame-rates: 23.98, 24, 25, 29.97, 29.97DF, 30, 30DF

TC Displayed

Sets what time code Nomad will display on the LCD screen.

- **GENERATOR** - Nomad displays the time code from the internal time code generator.
- **CARD** - Nomad displays the time code from the file that is being recorded or playing back.

TC Output

TC out sets the time code source that will be sent to the time code output connector.

- **GENERATOR** - Nomad outputs time code from the internal time code generator.
- **CARD** - Nomad outputs time code from the file that is being recorded or playing back.

Increment User Bits

If incremental user-bits is set to on the user bits will automatically increment with each take.

UB Date Style

If the date is being assigned as the user bits the UB date style determines how the date is displayed.

- **EU** - European (DDMMYY)
- **US** - United States (MMDDYY).

Auto Date Jam

If the auto date jam is set to on Nomad will automatically jam the user bits to the internal date upon boot up.

If auto date is set to off the user bits will stay as previously set.

Pressing the A-MIX Key

When Auto-Mix is enabled pressing the A-MIX key will open the Auto-Mix menu (providing MP3 is not enabled).

See the Auto-Mixer section of this manual for Auto-Mix operations.

When Auto-Mix is off pressing A-MIX will open the metadata menu.

Pressing the Z-Net Key

Pressing the Z-Net Key will open the ZaxNet transmitter control menu. Once opened press one of the multi-function keys (1 through 8) to choose the unit code of the transmitter that will be adjusted. So for example channel 1 will control a TRX transmitter with a unit code set to 1 and channel 2 will control a TRX with a unit code set to 2.



Trim

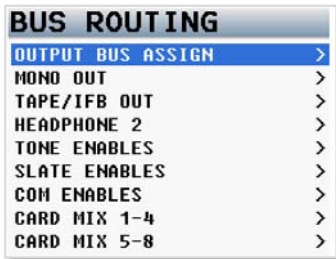
This is where the input gain of the Zaxcom TRX wireless transmitter can be change from. Rotating the MENU knob to the left will decrease the gain. Rotating the Menu knob to the right will increase the gain.

TRX Frequency

This is where the frequency of the Zaxcom TRX wireless transmitter can be change from. Rotating the MENU knob will change the frequency. Please note that it will take about 2 seconds for the TRX to change its frequency to match the frequency entered here.

Pressing the Bus Key

Pressing the bus key opens the bus routing menu.



Output Bus Assign

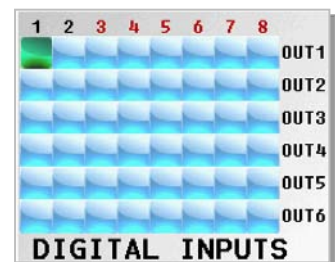
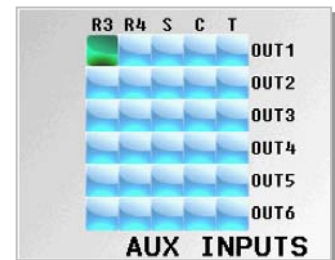
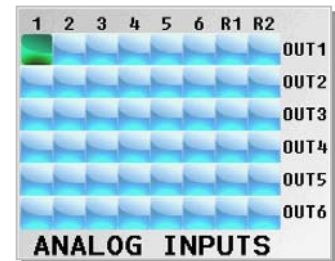
From the output bus matrix is where the analog and digital inputs are assigned to the output buses.

The top line of the three bus assign matrices indicates the following sources:

- Analog inputs - XLR inputs 1-6
- R1, R2, R3, R4 - TA5 inputs (camera returns / line level inputs 7-10)
- Digital inputs 1-8
- S = Slate
- C = Com
- T = Tone

Please note that when the Input is in **RED** that means that the input is unavailable. To make the input available go to the input configure menu to change the selection number.

To move between the matrixes, press the BUS Key.



Setting a Cross-Point

Rotate the MENU knob to scroll through the matrix. Stop in the matrix, at the intersection of the input channel and output bus, where the output will be routed to. Press the MENU knob to cycle through the available cross points, which are:

- X – The input will be sent to the output bus post-fader.
- P – The input will be sent to the output bus pre-fader.
- $\bar{X}$ – The input will be sent to the output bus post-fader with phase inverted.
- $\bar{P}$ – The input will be sent to the output bus pre-fader with phase inverted.

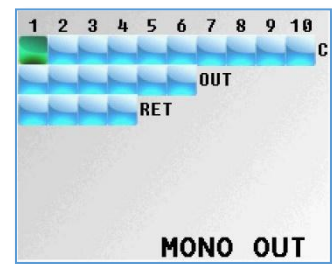
To add the optional phase invert, while in this matrix press the STAR key. Then by pressing the MENU knob, Nomad will now be able to cycle through the selections with phase invert.

Power cycling the unit will reset it to no inversion mode but will keep the phase invert choice.

Mono Out Matrix

This matrix sets what audio is routed to the mono out connector.

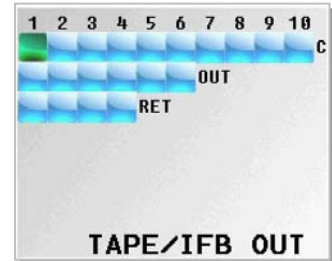
- **C** - Card Tracks (1 through 10)
- **OUT** - Output bus (1 through 6)
- **RET** - Return inputs (1 through 4)



Tape/IFB Out

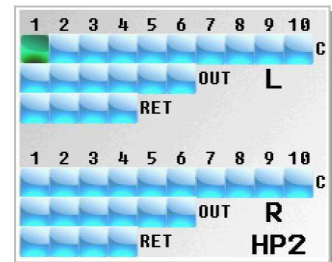
This matrix let sets what audio is routed to the tape out connector. The tape out matrix also routes what audio is sent to the IFB feed. The IFB feed can be received by a Zaxcom ERX receiver.

- **C** - Card Tracks (1 through 10)
- **OUT** - Output bus (1 through 6)
- **RET** - Return inputs (1 through 4)



Headphone-2

This matrix sets what audio is routed to the Headphone-2 connector.



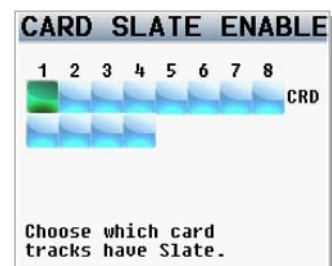
Card TrackTone Enable

This matrix assigns which card tracks have tone assigned to it.



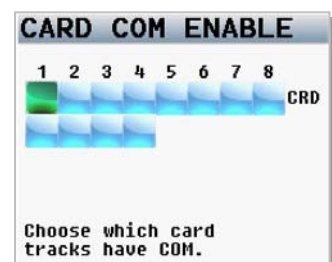
Card Track Slate Enables

This matrix assigns which card tracks have the slate microphone assigned to it.



Card Tracks Com Enables

This matrix assigns which card tracks have the com microphone assigned to it.



Card Routing – Nomad 10 and 12 Only

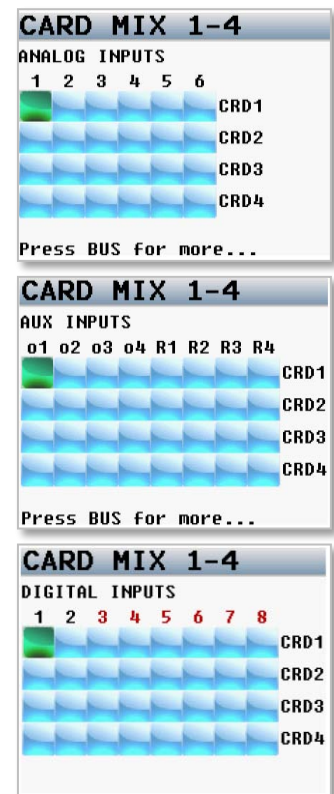
These matrices allow you to route the analog inputs, digital inputs, returns and output busses to the card tracks on Nomad 10 and 12. The card mix matrices are broken down as 1-4, 5-8 and 9-12 to additional groups of card tracks can be accessed from the bus menu. For Nomad Lite routing please see page 20.

The top line of the three pages indicates the following sources:

- Analog Inputs 1-6
- o1, o2, o3, o4 – Output Buses 1-4
- R1, R2, R3, R4 – TA5 Inputs (camera returns / line input 7-10)
- Digital Inputs 1-8 – the **RED** in the top line mean that those digital inputs can't be assigned because they are not available. To make the inputs available adjust the input configure in the mode menu.

Bus routing is fully cross-faded so the selection may be changed while in Record mode.

To toggle to the next matrix, press the BUS Key.



Setting a Cross-Point

Rotate the MENU knob to scroll through the matrix. Stop in the matrix, at the intersection of the input channel and output bus, where the output will be routed to. Press the MENU knob to cycle through the available cross points, which are:

- X – The input will be sent to the output bus post-fader.
- P – The input will be sent to the output bus pre-fader.
- $\bar{X}$ – The input will be sent to the output bus post-fader with phase inverted.
- $\bar{P}$ – The input will be sent to the output bus pre-fader with phase inverted.

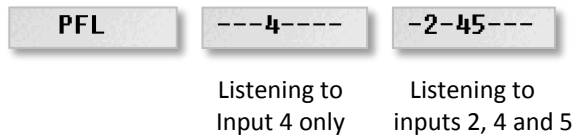
To add the optional phase invert, while in this matrix press the STAR key. Then by pressing the MENU knob, Nomad will now be able to cycle through the selections with phase invert.

Power cycling the unit will reset it to no inversion mode but will keep the phase invert choice.

Pressing the PFL Key

Pressing the PFL Key puts Nomad into Pre Fader Listen mode. Once the PFL key is pressed, the name in the Headphone Monitor field is replaced with PFL alternating with the selected channel number(s) that are being monitored.

To change what is being listened to press the input number keys you want to listen to. If you press and hold a second key that channel is added to the PFL:



To go back to normal listening press the headphone knob.

Nomad will remember the last PFL selection. So when the PFL key is pressed again the channel(s) that were selected when exiting will be the channels(s) that will come back when the PFL key is pressed again.

Pressing the Setup key

Analog Setup Menu

Pressing the setup key will display to the analog setup menu where the input parameters of the 10 adjust the parameters of the 10 analog inputs. After pressing the setup key pressing one of the multi-function keys will jump to the setup menu of the corresponding input - channel 1 through 10.

Adjustable Parameters

- **Input Trim** - Adjusts the input trim.
- **Input Type** - Selectable between mic level and line level.
- **Input Compressor** - Turns on the input compressor and set compressor groups.
- **48 Volt Phantom Power** - Turns on or off phantom power.
- **Input Delay** - Adjust the input audio delay and is variable from .0MS to 100MS in .1MS increments.
- **High Pass Filter** - Turning on the HPF turns on a fixed frequency hardware filter. Adjusting the frequency adjusts a software filter that is adjustable between 40Hz to 230Hz.
- **Two Variable Notch Filters** - Notch filters with independent adjustable frequencies.
- **Mix 8 Trim** - Choose between Normal and ZaxNet
 - **Nomad** - The trim knobs on the mix 8 adjust the input trim.
 - **ZaxNet** - The trim knobs control the TRX gain remotely (TRX with the unit code set to 001 is knob 1; TRX with unit code 002 is knob 2 etc.).
- **ZaxNet ID** -
- **Phase Invert** - Reverses the phase of the input.

Input Compressor Linking

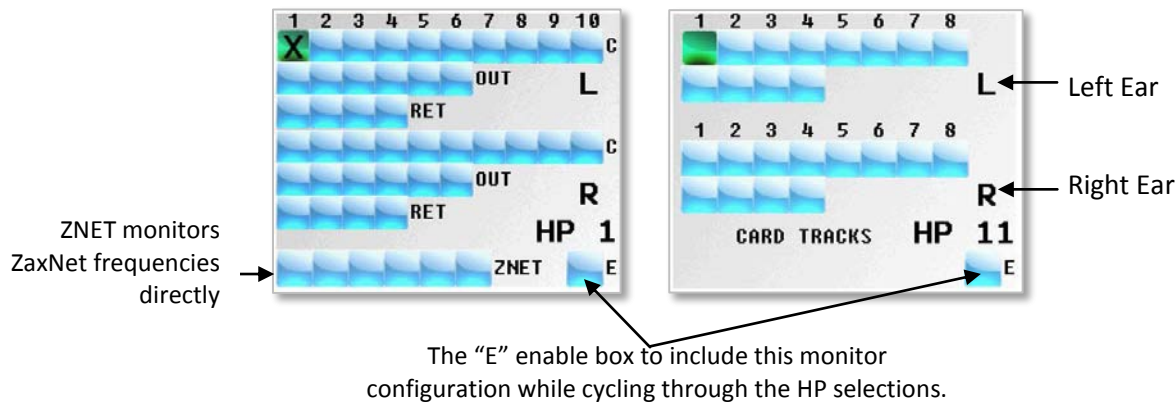
When using a stereo or surround microphone the input compressors (limiters) should be linked to insure that the spatial integrity of the signal is maintained. Nomad has three separate compressor groups.

For example, a stereo microphone on inputs 1 and 2 may have their limiters set to Group A. So if the signal on input 1 needs compressing, the compressor on both 1 and 2 will activate together rather than just channel 1.

AES Setup Menu

After pressing the setup key pressing the star key will toggle between the analog and the AES digital set up menu.

Main Headphone Setup



Nomad has 12 individual headphone matrices available to store user configurable headphone setups. Each set up each matrix with any combination of the following:

- Card tracks (C)
- Output Buses (OUT)
- Camera Returns (RET)
- ZaxNet Wireless (ZNET) (not available in Nomad Lite)

Please note that only one ZNET choice can be made per headphone matrix. Each box represents the RX channel that was setup the ZaxNet set up menu. So for example frequency 1 set up in the ZaxNet setup menu would be the first box and frequency 2 would be the second box.

Setting up the headphone matrices

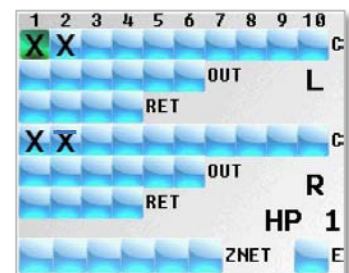
1. To access the headphone setup matrix - simultaneously press MENU knob and headphone knob.
2. While in the matrix, scroll the MENU knob to highlight the cross-point that will be monitored.
(L selections are sent to the left ear and R selections are sent to the right ear)
3. Press the MENU knob to put an X in the matrix.
4. Select the E to enable the setup will be active when cycling through the headphone matrices.
5. Press the headphone knob to advance to the next matrix.
6. To exit, press and hold the headphone knob.
7. A custom name to each setup matrix for easy identification. To add names go to the monitor name menu in ENG menu.

Please note to easily monitor the recorded tracks during playback simply set up a matrix and name it PLAY. Then when play is pressed from Nomad this matrix will automatically be routed to the main headphones so recorded tracks can be listened. Then when stop is pressed Nomad will automatically jump to the matrix that was being monitored.

Headphone matrix setup to decode MS stereo

The following is the proper setting for M-S headphone decoding. This example uses card track 1 as the Mid and card track 2 as the Side:

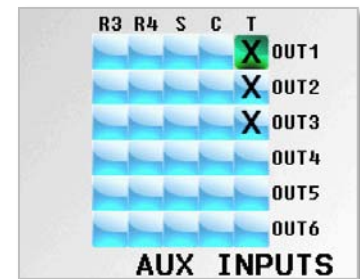
To phase invert - press the STAR key when in the headphone setup matrix. Then press the MENU knob to phase invert a selection. Phase invert will be shown with an X and a line above it.



Setting Up and Engaging Tone

Assigning Tone to output busses

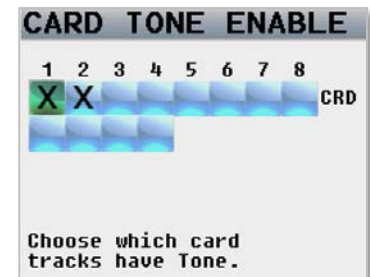
To assign tone to an output bus, press the BUS key and go to the output bus assign matrix. When in the matrix press bus again to access the aux input matrix to select which output bus will receive tone when tone is engaged. Please note that only the busses with tone routed to it will output the slate tone when the visual time code slate tone is activated.



Shows that output busses 1, 2 and 3 will output tone when tone is engaged.

Assigning tone to card tracks

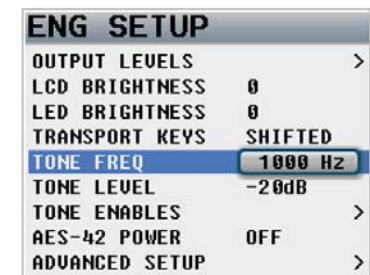
To assign tone to card tracks, press the BUS key and go to the tone enable matrix to select which card tracks will receive tone when tone is engaged.



Shows that card tracks 1 and 2 will record tone when tone is engaged.

Adjusting the tone frequency and level

Tone level and frequency can be adjusted in the ENG setup menu. Please note it is advised to keep the tone level at -20dB for most operations.

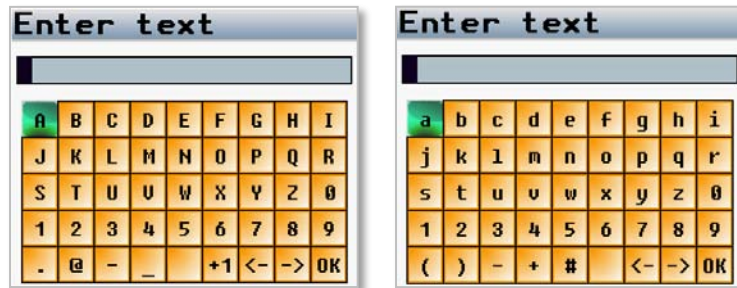


Engaging tone

To toggle tone generation on/off, press and hold the SETUP Key for 1.5 seconds.

Entering Text

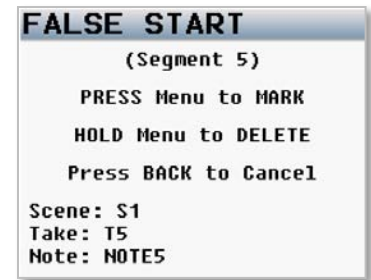
The text keyboard allows alphanumeric data entry for all parameters that require data input. This screen will appear when an item that requires text is selected.



- To enter a character, turn the MENU knob until the character is highlighted and then press the MENU knob to select the character.
- Rotating the MENU Knob will cause the highlighted box to move right and left (this will also wrap around to the next line).
- Pressing and rotating the MENU knob will cause the highlighted box to move up and down.
- Press and hold the MENU knob for 1 second to toggle between upper and lower case letters.
- If inputting scene or take metadata +1 can be selected to increment the value by 1.
- To enter the text press and hold the headphone knob for 1 second or click on OK.

False Start

Pressing and holding the STOP key for 1.5 seconds after stopping will open the false start page. From this page a take can be marked as a false start or just delete the file.



ZaxNet Quick Start Guide

TRX transmitter control

1. From Nomad:
 - a. From the main menu, select ZaxNet setup.
 - b. Scroll down and select input configure. To be able to use ZaxNet, make sure that input type is set to 8 or higher.
 - c. Power cycle Nomad.
 - d. Return to the ZaxNet setup menu.
 - e. Make sure IFB Mode is set to TX or TX+RX.
 - f. Select a ZaxNet transmit (TX) frequency.
Tip: There are several smart phone apps, which will show what Wi-Fi frequencies are being used in the area. This can be useful in selecting an open frequency.
 - g. Scroll down to Group Code and pick a number. Unless using multiple Zaxcom IFB transmitters, it is advised to set this to 1.
 - h. Set transport CMD5 to slaved.
2. Turn on the TRX transmitter while holding down the MENU key to access the extended menu.
 - a. Press the MENU key to advance to the IFB receive frequency page. Make sure that the 2.4 GHz frequency on the TRX transmitter is the same frequency that was selected in Nomad's ZaxNet setup menu.
 - b. Press the MENU key to advance to the TC Jam Mode. Make sure that it's set to Auto-Load.
 - c. Press the MENU key to advance to the TC Source. Set this to IFB (RF) so that the TRX is receiving TC wirelessly from Nomad.
 - d. Press the MENU key to advance to the Group ID. Make sure that the group ID number on the TRX transmitter matches the number that was chosen in the ZaxNet setup menu.
 - e. Press the MENU key to advance to the remote control unit ID. This number will correspond to the ZaxNet input on Nomad. For example, 001 on the unit code will correspond to input 1 on the Nomad, 002 will correspond to input 2 on the Nomad, etc.
 - f. Press the MENU key to advance to "Allow IFB Remote Control". This should be set to ON.
 - g. Power cycle the transmitter to save the settings.
3. To optionally assign a Nomad fader to control the transmitter gain:
 - a. Go to the main menu and select fader assign.
 - b. When in the matrix press the Star key. Then select the appropriate cross point and press the MENU knob until a Z is displayed. The Z cross point tells the fader to control the transmitter's gain via ZaxNet.

The transmitter should now be receiving time code from the Nomad, go into record mode when Nomad goes into record, and the gain and frequency of the transmitter can be remotely controlled via Nomad.

QRX IFB audio receive

1. From Nomad:
 - a. From the main menu, select ZaxNet Setup.
 - b. Scroll down and select input configure. To be able to use ZaxNet, make sure that input type is set to 8 or higher.
 - c. Power cycle Nomad.
 - d. Return to the ZaxNet setup menu.
 - e. Make sure IFB Mode is set to RX or TX+RX.
 - f. Scroll down to RX channels and select FREQ 1 to select which frequency audio will be received on.
Tip: There are several smart phone apps, which will show what Wi-Fi frequencies are being used in the area. This can be useful in selecting an open frequency.
2. From the QRX:
 - a. Advance to the IFB extended menu.
 - b. Set the IFB to TX and set the TX frequency to the same frequency that FREQ 1 was set to on Nomad.
3. From Nomad:
 - a. Advance to the headphone setup matrix and put a cross point in the corresponding ZNET matrix. To listen to FREQ 1 select the first box, FREQ 2 the second, etc.
 - b. Now when that HP matrix is selected the audio being sent from that QRX will be heard. If the IFB Mode set to TX+RX, Nomad will temporarily stop transmitting over ZaxNet and receive signal while in that headphone matrix. When that headphone matrix is left, Nomad will start transmitting again.

Feeding an ERX audio and time code

1. From Nomad:

- a. From the main menu, select ZaxNet Setup.
- b. Scroll down and select input configure. To be able to use ZaxNet, make sure that input type is set to 8 or higher.
- c. Power cycle Nomad.
- d. Return to the ZaxNet setup menu.
- e. Make sure IFB mode is set to TX or TX+RX.
- f. Select a transmit (TX) frequency.
Tip: There are several smart phone apps, which will show what Wi-Fi frequencies are being used in the area. This can be useful in selecting an open frequency.
- g. Scroll down to Group Code and pick a number. Unless using multiple Zaxcom IFB transmitters, it is advised to set this to 1.
- h. Advance to the bus routing menu and select Tape/IFB and route what audio sources to be sent to the ERX.

2. At the ERX:

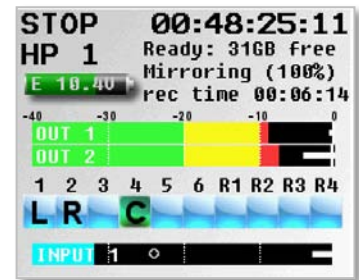
- a. Power up while holding the MENU key to get into the extended menu.
- b. Advance to the TC frame rate and set it to the same frame-rate as Nomad.
- c. Advance to the IFB frequency and set it to the IFB frequency that was selected in Nomad.
- d. If the ERX is receiving a good signal two bars, displaying the signal strength, will appear on the right hand side of the screen.
- e. Advance to the group ID and set it to the code entered into Nomad.
- f. Advance to the time code output enable menu, if it is to be used:
 - IFB audio feed - it set to OFF.
 - Time code feed - with or without audio, to a camera select the appropriate channel (left, right, both) where time code will be sent. Please note the any channel that time code is not routed to will receive audio.
- g. If the camera has trouble receiving time code, advance to the TC OUTPUT LEVEL and adjust the voltage until the camera recognizes the time code.

ENG /EFP Bag Operation

ENG mode was created to aid in mixing and recording when involved in a “run and gun” situation. In ENG mode all 10 inputs can be trimmed, mixed and panned right from the ENG Home screen.

ENG Home page:

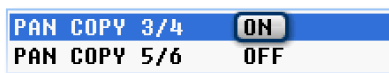
- Output busses 1 and 2 (Left / Right).
- 10-channel routing matrix where inputs 1 through 10 can be panned inputs 1-10. The inputs can pan to L (left), R (right) or C (center).
- Input meter that follows AutoTrim.



ENG Panning

The pan routing matrix is essentially a shortcut to the output bus assign matrix. From this matrix an input can be routed post-fade to a pair of outputs busses. When a change is made in the ENG pan routing matrix, it adjusts the routing in the output bus assign matrix.

If feeding more than one camera, additional pairs can be set to follow the same routing. This means that buses 3 & 4 and 5 & 6 can also be routed to follow the pan routing done on this home screen. To add pairs, go to the MODE menu and enable the appropriate pan copy.



← In this example output busses 3 & 4 will follow the pan selections made in the ENG home screen and outputs 5 & 6 will NOT. Please note that by default 1 & 2 are

Once panning is enabled in the ENG home screen, press the BUS Key to enter and highlight the PAN routing matrix. Then rotate the menu Knob to select the input to be panned. Pressing the menu knob will cycle the assignment as L, C and R to each input pair that was selected.

If prevent empty pan is set to ON in the advanced ENG menu the blank option is removed, leaving only L, C, R.



← The pan matrix shows where each channel will be outputted to the L=left, R = right, C= both. Pressing the MENU knob will advance the selection - pressing and hold will go back.

AutoTrim

AutoTrim eliminates the need for a separate hardware trim knob for each analog input. AutoTrim mode can be enabled in Mode page.

When AutoTrim is enabled and a fader is “touched”, two things come into play:

- The blue LED next to the fader illuminates to indicate that channel is active for AutoTrim.
- The MENU knob functions as the input trim for that channel. Turning the MENU knob adjusts the trim level for that input. The trim level is indicated by the blue dot in the input meter. Please note the trim indicator’s position does not relate to a specific value. It is used for relative adjustment only.



AutoPan

AutoPan is a feature that causes the COM key act as a pan knob. When AutoPan is turned on in the mode menu and a fader is touched the blue LED next to that fader will illuminate indicating the input routed to that fader will be panned when the COM key is pressed. AutoPan is active from any meter screen.

When pressing the COM key the panning for the illuminated channel will cycle from left to center to right to blank - unless "Prevent Empty Pan" is turned ON in the ENG advanced menu then the blank option will not be cycled through.

As an input is panned with AutoPan the headphone display will temporally show which input is panned to which position.

A1=L **A1=C** **A1=R**

Analog input 1 panned Left, Center, Right

Virtual Fader

Nomad has 6 hardware faders and 10 inputs. Inputs 7-10 can be mixed from the ENG home screen by activating the VFader mode in the mode menu. The virtual fader will allow all 10 channels to be mixed right from the ENG meter screen using the menu knob as the hardware fader for those inputs.

Operating virtual faders

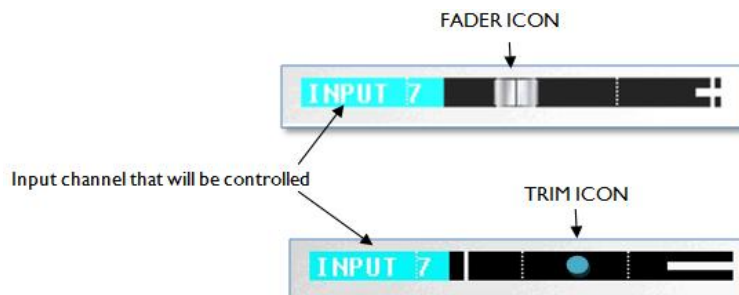
- Go to the mode menu and select "VFader Cycle" and set it for which inputs will be controlled.

VFADER CYCLE **7,8,9,10**

- In the mode menu select "VFader Mode" to choose if faders only or faders and trim will be controlled.

VFADER MODE **vFaders** **VFADER MODE** **vFad+Trim**

- While in the ENG home screen, press the menu knob. At that point the bottom meter on the screen will display which input will be controlled with the menu Knob.
 - If the fader icon is displayed the menu knob will adjust the mix of that input.
 - If the blue trim icon is displayed the menu knob will adjust the trim of that input.
 - Pressing the MENU Knob will cycle through the inputs that were chosen.



USB Keyboard support - *Nomad 12 only*

A USB keyboard plugged into Nomad 12 can be used to start and stop recording, navigate menus, select and adjust menu items, enter metadata and adjust input trim.

System Requirements

The USB keyboard operates on the Linux processor that is installed in Nomad 12 only.

To use a USB keyboard the Nomad will need to be running software version 6.56 or higher.

The Linux processor needs to be running software dated Dec 21.

To check the Linux software version go into the ENG Menu > Advanced Setup > USB Status. On the USB status page if “USB Option Is Ready” should be displayed.

If any of these conditions are not met please contact Zaxcom.

Attaching a USB Keyboard

With Nomad powered down plug a USB keyboard into the USB port then power up Nomad as normal. Approximately 20 seconds after boot-up Nomad will communicate with the attached keyboard and “Found Keyboard” will flash once on the screen. If the keyboard is not found Nomad may need to power cycled.

Using the Keyboard

After the keyboard is identified Nomad can be navigated and controlled with shortcuts from the below list. Some shortcuts have two key options - this is for smaller keyboard that may have limited keys.

Locking the Keyboard

There is an option to lock the keyboard to prevent accidental key presses when not using the keyboard.

To lock the keyboard simultaneously press CTRL+ALT+DELETE or simultaneously press CTRL+ALT+L

To unlock the keyboard simultaneously press CTRL+ALT+DELETE or simultaneously press CTRL+ALT+U

After the keyboard is locked or unlock “Keyboard Locked” or “Keyboard Unlocked” flash on the home screen. After the keyboard status is displayed this message will not be displayed until the lock status is changed again.

Keyboard Shortcuts

Menu Access			
Main Menu	ALT+M	ENTER	Press ↑↓ keys to navigate through menus and then press ENTER to select a menu item.
Headphone Matrix	ALT+H	H	To toggle through additional matrices press > to advance or < to go back.
Time Code Menu	F1	T	A single press opens the visual slate additional presses advances to time code menus.
AutoMix Menu	F2	A	Note: If AutoMix is set to off this short cut will navigate to the Meta Data page.
ZaxNet Menu	F3	Z	Then press the number keys (1 thru 0) to jump to the specific transmitter setup.
Bus Routing Menu	F4	B	Then to navigate through the bus sub menus use the ↑↓ keys.
Set Up Menu	F6	S	To access specific setup pages press the use number keys (1 thru 0).
Record Enable Matrix	ALT+E		Access the record enable matrix.

Edit Metadata			
Scene	F7	ALT+S	Then use the USB keyboard to enter scene information and press enter when done.
Take	F8	ALT+T	Then use the USB keyboard to enter take information and press enter when done.
Note	F9	ALT+N	Then use the USB keyboard to enter note information and press enter when done.
Track name menu	F10	ALT+K	Then use the USB keyboard to enter track information and press enter when done.

Transport Control			
Record	CTRL+R		Starts recording.
Stop	CTRL+S		Stops recording or playback.
Play	CTRL+P		Starts playback.
Playback Scrub FF	]		Fast forward scrub while playing back.
Playback Scrub REW	[		Reverse scrub while playing back.
Jump To Next File	.		Jumps to the next file while playing back.
Jump To Previous File	,		Jumps to the previous file while playing back.

AutoPan			
AutoPan forward	CTRL+ +		Pans the highlighted input forward Left - Center - Right
AutoPan reverse	CTRL+ -		Pans the highlighted input reverse Right - Center - Left

Pre Fader Listen			
PFL mode	F5	P	Then select the input to listen to by pressing the number keys 1 through 8.
PFL Nomad faders	CTRL+		Pressing CTRL + a number key will toggle through inputs assigned to the Nomad faders.
PFL FP8 faders	ALT+		Pressing ALT + the number key will toggle through the inputs for the FP8 faders.
			If ALT or CTRL key is held while pressing number keys adds additional PFL selections.

General Navigation			
Select a menu item	ENTER		Selects a highlighted item.
Go home	HOME		Jumps directly to the home meter screen.
Back	ESC		Jump back one menu.
Navigate in a menu			
Up	↑	→	These keys move the cursor up as well as increase a numeric value.
Down	↓	←	These keys move the cursor down as well as decrease a numeric value.
End	END		Jumps to the last item of the menu.
Toggle meter screens	PG UP	PG DN	Pressing SHIFT+8 to access the star key will also toggle meter screens.
Toggle HP matrices	<	>	These keys toggle through the headphone matrices

Additional			
Enable Tone	CTRL+T		Toggles tone on and off.
Enable Slate	CTRL+L		Push and hold to turn on slate mic.
Enable Com	CTRL+C		Push and hold to turn on com mic.
Trim Adjust	↑ ↓		Adjusts the input trim of the highlighted input.
MP3 Mark	CTRL+F1		When MP3 is enabled this will toggle marking the file to create an MP3 of the file.

Compact Flash Cards

Currently we recommend using SanDisk or Transcend compact flash cards. Any size card 4 to 128GB will be fine. For normal operation it is not necessary to use fast speed cards as it will not make Nomad write any faster. We do not advise using Lexar, Kingston, Delkin or off brand cards from questionable manufacturers. And please only buy cards from reliable sources and avoid questionable retailers, because counterfeit cards do exist and can be unreliable and cause crashing.

If planning to record at 96 kHz, choose a card that claims 10 MB per second sustained write speed maximum write speed does not count.

It is recommended to test the cards before use, even if it is a brand/size that has been used in the past. To test the cards simply perform a record test for 15 to 20 minutes. If Nomad stops recording or causes a crash it is most likely a result of bad media.

Syncing Nomad to a Denecke Slate

The LTC stream out of the Nomad has a “jitter” in the time code signal at 29.97 fps and 23.976 fps. This can result in the Denecke TS-C or the TS-3 slates identifying the wrong code, if the slate is set to “Auto Set” (Position 5). In addition if “Auto Set” is used the slate can experience a time code drift.

So when setting the slate to receive time code at 29.97 or 23.976, do not use the auto set mode. Just simply set the rotary dial to the corresponding time code frame rate. When syncing the slate “Sync Err” will be displayed. Simply ignore it. The slate will accept the sync and the slate and Nomad will stay in perfect sync with each other.

Nomad Connector Assignments

Audio Input / Output Connectors (XLR-3)

- Pin 1 – Ground
- Pin 2 – Signal (+)
- Pin 3 – Signal (-)

Audio Input / Output Connectors (TA-5)

- Pin 1 - Ground
- Pin 2 - Channel A (Left) (+)
- Pin 3 - Channel A (Left) (-)
- Pin 4 - Channel B (Right) (+)
- Pin 5 - Channel B (Right) (-)

Mono & Tape Output Connectors (1/8" TRS or 1/8" TS)

- Tip - +
- Ring - N/C
- Sleeve – Ground

Slate Microphone Input Connector (1/8" TRS)

This is a balanced input and can be used with dynamic microphones. It can also be used unbalanced with low voltage microphones.

- Tip – (+) / Hot – Biased to 5 Volts
- Ring - (-) / Cold – Biased to 5 Volts
- Sleeve - Ground

Headphone Output Connectors (1/4" TRS or 1/8" TRS)

- Tip – Signal Left
- Ring – Signal Right
- Sleeve – Signal ground

Power Connector (Hirose-4 Connector)

- Pin 1 – Ground (-)
- Pin 2 – Not Connected
- Pin 3 – Not Connected
- Pin 4 – DC (+)

GPI Remote Roll (USB Type A)

- Pin 1 – Not Connected
 - Pin 2 – Not Connected
 - Pin 3 – Connect to one leg of the toggle switch
 - Pin 4 – Connect to the other leg of the toggle switch
- (When the toggle switch is closed the circuit will be completed)

USB to Mix 8 (USB Type A to DB9M)

USB - DB9M

Pin 1 - Pin 1

Pin 2 - Pin 9

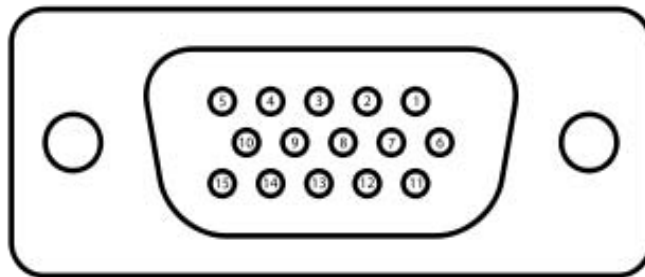
Pin 3 - Pin 8

Pin 4 - Pin 6

Case - Pin 5 (Shield)

AES Digital Input / Output Connectors (DB-15)

Nomad uses a mini DB-15 (DE-15) connector for the AES (digital) input and output connectors.



Top row pins: 5, 4, 3, 2, 1

Middle row pins: 10, 9, 8, 7, 6

Bottom row pins: 15, 14, 13, 12, 11

DB -15 Pin Number	IN / OUT	AES PAIRS	Connects to XLR Pin
1	IN	3 / 4	2 (+)
2	IN	1 / 2	2 (+)
3	OUT	5 / 6	2 (+)
4	IN	7 / 8	2 (+)
5	IN	5 / 6	2 (+)
6	OUT	1 / 2	3 (--)
7	OUT	1 / 2	2 (+)
8	GROUND	GROUND	1
9	OUT	3 / 4	3 (--)
10	OUT	3 / 4	2 (+)
11	IN	3 / 4	3 (--)
12	IN	1 / 2	3 (--)
13	OUT	5 / 6	3 (--)
14	IN	7 / 8	3 (--)
15	IN	5 / 6	3 (--)

Updating Firmware

Each Nomad is shipped with the latest firmware version installed. When newer firmware becomes available, it can be downloaded from the Zaxcom website: <http://www.zaxcom.com/software-updates>

Newer version of beta software may be found on the Zaxcom Forums: <http://www.zaxcom.com/forum>

Upgrading the Firmware

1. Format a compact flash card using a PC or Mac.
2. Using a PC or Mac download the new software named (NomadProgFile_vX.XX.bin) and copy it to the card.
3. Insure that a set of fully charged batteries are installed or a stable power supply is connected.
4. With Nomad powered down, insert the CF card containing the .bin file into the mirror slot. Please make sure that only one .bin file is on the card.
5. Press and hold the STAR key while powering on Nomad.
6. Once the "Preparing to burn ROM" line is displayed, the STAR key can be released.
7. After the "SUCCESS" line is displayed, cycle the power.
8. Verify that Nomad is running the version just installed in the about Nomad menu.
9. After updating the software, it is generally advised to perform a restore to factory defaults.

Product Support

Register your product with Zaxcom: <http://zaxcom.com/support/product-registration/>
Download the latest **Firmware** from: <http://zaxcom.com/support/updates/>
Download the latest **User Manuals** from: <http://zaxcom.com/support/updates/>
Submit Technical Questions at: <http://www.zaxcom.com/submit-a-technical-question>
Submit information for **Repair Services** at: <http://www.zaxcom.com/support/repairs>
Join the **Zaxcom User Forum** at: <http://www.zaxcom.com/forum/forum.php>
Join the **Zaxcom Face Book User Group** at: <https://www.facebook.com/groups/682199065139938/>

Nomad Specifications

Hardware

Analog Inputs

Channel Count	
Mic / Line	6
Line only	4 (camera return or line level inputs)
Connector	
Mic / Line	XLR-3F
Line only	TA-5F
Input Range	
Mic-level	–56 dBu to –26 dBu
Line-level	–10 dBu to +8 dBu
Phantom Power	48 VDC, 40 mA total combined (mic input only)
Impedance	
Mic-Level	1.0 k ohms
Line-Level	10 k ohms
ADC Bit-depth	24
ADC Dynamic Range	
W/O Compressor	135 dB
With Compressor	115 dB
Clipping Level	+28 dBu
Frequency Response	50 Hz to 22 kHz (48 kHz sampling-rate)
THD + Noise	0.0015%
Ext Slate Mic	
Connector	1/8" (3.5mm) stereo jack
Input Range	–56 dBu to –26 dBu

Digital Inputs (not available in Nomad-Lite)

Channel Count	8 (4 x AES-3 pair, 1 x AES-42 pair)
Connector	1 x mini DB-15 (DE-15) shared w/digital outputs
Sample-rate Converters	4 pairs

Analog Outputs

Channel Count	4 x balanced XLR-3M 6 x balanced (3 x TA-5M)
Tape/Mono	2 x unbalanced 1/8" (3.5 mm) stereo
Output Level	0 dBu, -10dBu, -35dBu at –20 dBFS
Clipping Level	+20 dBu
DAC Bit-depth	24
DAC Dynamic Range	115 dB
Impedance	30 ohms
Source	Mix/Direct (selectable)

Digital Outputs (not available in Nomad Lite)

Channel Count	6 (3 AES pairs)
Connector	1 x mini DB-15 (DE-15) shared w/digital inputs
Source	Mix/Direct (selectable)

Headphones

Connector #1	1/4" stereo jack
Connector #2	1/8" (3.5mm) stereo jack
Dynamic Range	115 dB
Impedance	100 ohms (optimal)

Other Connectors

External Storage	1 x USB 2.0 (Nomad-8 & 12 only)
External Storage Power	5 watts
Serial/RS-422	1 x 4-pin USB style (Zaxcom proprietary)
Time code	
Input	1 x BNC
Output	1 x BNC
External Power	1 x Hirose 4 pin
External Slate Mic	1 x 1/8" (3.5mm) stereo jack
IFB RF	1 x SMA-F

Recording

Internal Storage	2 x Compact Flash
External	USB (Nomad 8 and 12 only)

Time code Reader / Generator

Clock Accuracy	1.54 PPM (1 frame out in 6 hours)
Input Voltage Range	1 – 4 VPP
Output Voltage	2 VPP

Power

Internal	6 x AA (7 – 9 VDC, 1 – 3 hours of use {NiMH})
External	10 to 18 VDC (1/2 A @ 12 VDC)

ZaxNet RF Interface (not available in Nomad-Lite)

Function	Transmit or Receive
RF Power Output	50 mW
RF Modulation	Digital Spread Spectrum
RF Frequency Range	2.403 – 2.475 GHz
RF Frequency Step	0.001 GHz (1 MHz)
RF Bandwidth	1 MHz
Channel Separation	2 MHz
Emission Designator	180KV2E
FCC Part	CFR Title 47, Part 18

Miscellaneous

Display	Full color, sunlight readable LCD
Internal Slate Mic	Yes
Compatible w/Mix-8	Yes
Compatible w/Mix-12	Partial

Physical

Operating Temp Range	-10 to +120F
Size (H x W x D)	2.0" x 9.9" x 7.0" (50.8mm x 251.5mm x 177.9mm)
Weight (w/batteries)	3.8 lbs. (1.72 kg)

Software**Internal Mixer**

Mixer Cross-points	16 in / 16 out (pre-fader, post-fader, phase inversion)
Internal Processing	32-bit floating point DSP

Effects

Input Limiter	(A x 10, D x 8)
Type	Soft Knee
Attack	1 to 100 MS
Decay	0 to 100 MS
Threshold	-20 to 0 dB
Ratio	1.0:1 to 20.0:1
Input Notch Filter	(A x 10, D x 8)
Bands	2
Freq Range	20 Hz to 18 kHz
Q	9.9 (hardcoded)
Track Limiter	1 set of settings across all tracks
Attack	1 to 100 MS
Decay	0 to 100 MS
Threshold	-20 to 0 dB
Ratio	1.0:1 to 20.0:1
Make-up Gain	-12 to +12 dB
Input High pass Filter	(A x 10, D x 8)
Freq. Range	Off or 40 to 240 Hz
Input Delay	(A x 10, D x 8)
Time Range	0 to 100 MS
Output Limiter	1 set of settings across 6 outputs
Attack	1 to 100 MS
Decay	0 to 100 MS
Threshold	-20 to 0 dB
Ratio	1.0:1 to 4.0:1
Make-up Gain	-12 to +12 dB

Recording

Track Count	Model Dependent 10 or 12
Bit-depth	
Primary	24
Mirror	16 / 24
Sampling-rates (kHz)	44.1, 47.952, 48, 48.048, 88.2, 96
Card Format	
Primary CF	MARF (Mobile Audio Recording Format) II
Mirror CF	FAT32
Ext. USB Device	FAT32
File Formats	
Primary CF Slot	.ZAX
Mirror CF Slot	BWF-M, BWF-P
Ext. USB Device	BWF-M, MP3
Dual Disk Recording	Yes
Pre-record Duration	0 to 10 seconds (48.048 kHz and below)

Time code Reader / Generator

Time code Type	SMPTE
Time code Frame-rates	23.98, 24, 25, 29.97NDF, 29.97DF, 30NDF, 30

Zaxcom Warranty Policy and Limitations

Zaxcom Inc. values your business and always attempts to provide you with the very best service.

No limited warranty is provided by Zaxcom unless your Nomad ("Product") was purchased from an authorized distributor or authorized reseller. Distributors may sell Product to resellers who then sell Product to end users. Please see below for warranty information or obtaining service. No warranty service is provided unless the Product is returned to Zaxcom Inc. or a Zaxcom dealer in the region where the Product was first shipped by Zaxcom.

Warranty Policy

The Product carries a Standard Warranty Period of one (1) year.

NOTE: The warranty period commences from the date of delivery from the Zaxcom dealer or reseller to the end user.

There are no warranties which extend beyond the face of the Zaxcom limited warranty. Zaxcom disclaims all other warranties, express or implied, regarding the Product, including any implied warranties of merchantability, fitness for a particular purpose or non-infringement. In the United States, some laws do not allow the exclusion of the implied warranties.

Troubleshooting & Repair Services

No Product should be returned to Zaxcom without first going through some basic troubleshooting steps with the dealer you purchased your gear from.

To return a product for repair service, go to the Zaxcom Repair Services page <http://www.zaxcom.com/repairs> and fill in your information; there is no need to call the factory for an RMA. Then send your item(s) securely packed (in the original packaging or a suitable substitute) to the address that was returned on the Repair Services page. Insure the package, as we cannot be held responsible for what the shipper does.

Zaxcom will return the warranty repaired item(s) via two-day delivery within the United States at their discretion. If overnight service is required, a FedEx or UPS account number must be provided to Zaxcom to cover the shipping charges.

*Please note a great resource to troubleshoot your gear is the Zaxcom Forum: <http://www.zaxcom.com/forum>.

Warranty Limitations

Zaxcom's limited warranty provides that, subject to the following limitations, each Product will be free from defects in material and workmanship and will conform to Zaxcom's specification for the particular Product.

Limitation of Remedies

Your exclusive remedy for any defective Product is limited to the repair or replacement of the defective Product.

Zaxcom may elect which remedy or combination of remedies to provide in its sole discretion. Zaxcom shall have a reasonable time after determining that a defective Product exists to repair or replace a defective Product. Zaxcom's replacement Product under its limited warranty will be manufactured from new and serviceable used parts. Zaxcom's warranty applies to repaired or replaced Product for the balance of the applicable period of the original warranty or thirty days from the date of shipment of a repaired or replaced Product, whichever is longer.

Limitation of Damages

Zaxcom's entire liability for any defective Product shall, in no event, exceed the purchase price for the defective Product. This limitation applies even if Zaxcom cannot or does not repair or replace any defective Product and your exclusive remedy fails of its essential purpose.

No Consequential or Other Damages

Zaxcom has no liability for general, consequential, incidental or special damages. These include loss of recorded data, the cost of recovery of lost data, lost profits and the cost of the installation or removal of any Product, the installation of replacement Product, and any inspection, testing or redesign caused by any defect or by the repair or replacement of Product arising from a defect in any Product.

In the United States, some states do not allow exclusion or limitation of incidental or consequential damages, so the limitations above may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

Your Use of the Product

Zaxcom will have no liability for any Product returned if Zaxcom determines that:

- The Product was stolen.
- The asserted defect:
- Is not present,
- Cannot reasonably be fixed because of damage occurring when the Product is in the possession of someone other than Zaxcom, or
- Is attributable to misuse, improper installation, alteration, including removing or obliterating labels and opening or removing external covers (unless authorized to do so by Zaxcom or an authorized Service Center), accident or mishandling while in the possession of someone other than Zaxcom.
- The Product was not sold to you as new.

Additional Limitations on Warranty

Zaxcom's warranty does not cover Product, which has been received improperly packaged, altered or physically abused.