ROCKNA WAVEDREAM - user guide

Thank you for buying Rockna Wavedream digital audio processor. You have now one of the finest D/A converter available on the market.
The Wavedream was designed to give you countless hours of musical enjoyment.

The package you received should contain:

- Rockna Wavedream processor, black anodized
- Power supply cord
- Infrared remote control

Safety Precautions:

1) This device is meant for indoor use only.
2) Protect device from excessive heat, humidity and liquid filled objects, such as vases.
3) Clean only with dry cloth.
4) Do not remove product covering. This may cause an electric shock even if the device is not plugged in.
5) Use earth grouded outlet if applicable.

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6) Before plugging any cables in the device, make sure it is turned off.
7) Do not move the device while operational.
8) Lightning or static electricity can affect normal operation of the apparatus. Make sure that it is unplugged during a thunderstorm. If the device is affected by one of these conditions and stops behaving as it should, a power reset usually resumes it's normal operation.
9) Power off or unplug the power cord if the device is not to be used for a long period of time.
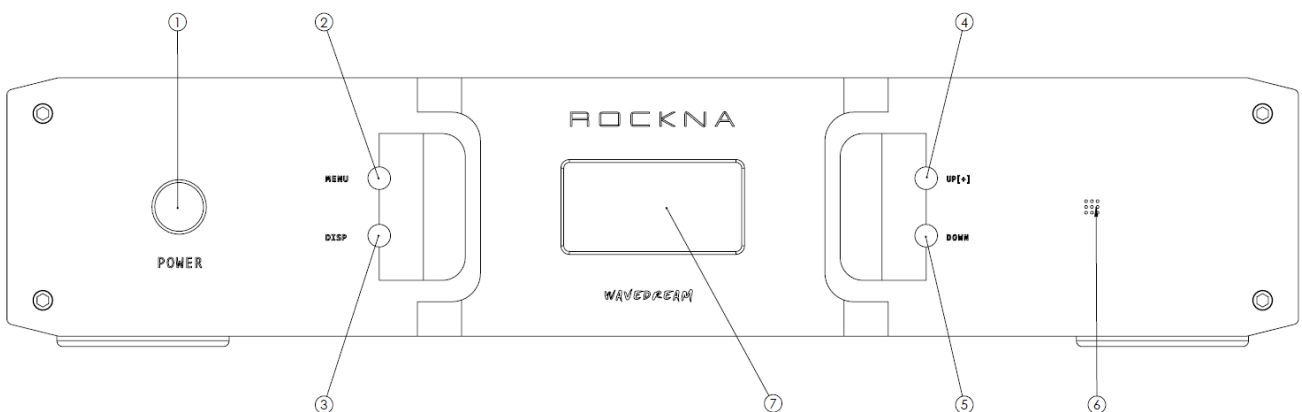

PRODUCT DESCRIPTION :

Digital to analog converter with variable analog outputs
Inputs are : AES/EBU, S/PDIF, USB, HD-Link1, HD-Link2
Outputs are: Single ended and XLR balanced audio outputs

FRONT VIEW :

LEGEND :

1) Power switch
2) Menu button (see using the menu section, similar function on remote control)
3) Display intensity button (similar function on remote control)
4) Up (+) button (similar with remote)
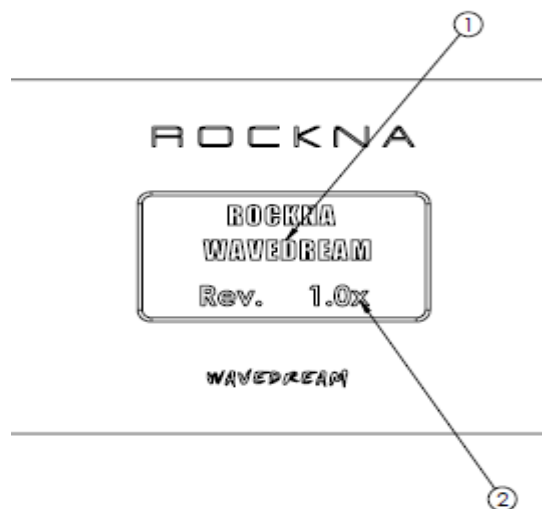5) Down (-) button (similar with remote)
6) IR sensor
7) OLED display

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   BACK VIEW :
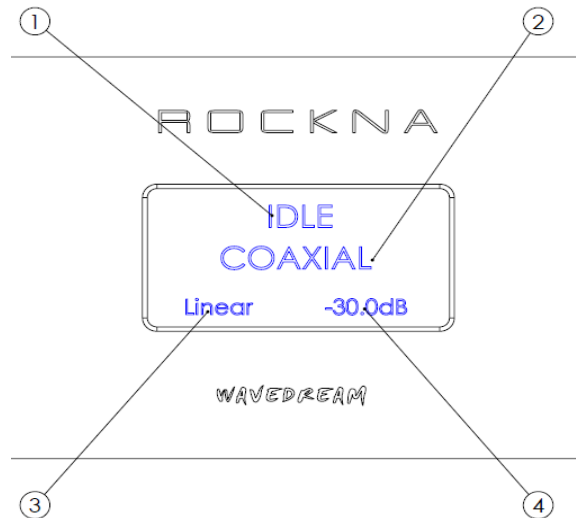

The conenctors on the back panel are self-explanatory.

POWERING UP

1) Connect the Wavedream to the mains.
2) Connect the necessary inputs and outputs.
3) Make sure you power up the Wavedream **before** the power amplifier you are using and shut it down **after** the power amplifier. In respect to signal purity path, the dac does not have muting relays in the signal path. Therefore, occasional pops can occur on powering up/shutting down. It is recommended to respect the above described power sequence.
4) On powering up, you should see a splash screen for a few seconds. The splash screen will contain "ROCKNA WAVEDREAM" name (1) together with firmware version (2). The firmware version is in format a.bs or a.bx, where a.b = firmware version; s comes from single ended, x from balanced.
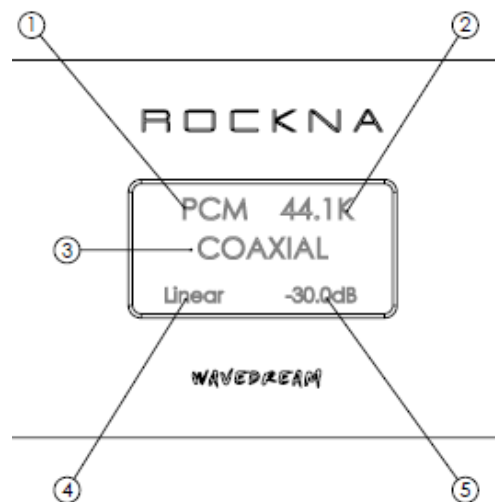
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5) After a few seconds, the welcome screen is replaced by the default screen. The default screen (no input signal) will show the status(1), data type, sample rate, active input(2), filter type(3) and volume setting(4).

DEFAULT SCREEN, IDLE (no signal)

ROCKNA

IDLE
COAXIAL
Linear   -30.0dB

WAVEDREAM

DEFAULT SCREEN, SIGNAL PRESENT
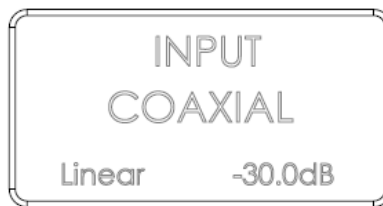
ROCKNA

PCM   44.1K
COAXIAL
Linear   -30.0dB

WAVEDREAM

1- Data type (can be PCM or DSD)
2- Sample rate (can be 44.1, 48, 64,128, 96, 176.4, 192, 352, 384)
3- Active input
4- Filter type
5- Volume setting

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USING THE MENU

A short press on the menu button [(2) on the front view] will acces the menu. A long press will exit the menu and return to the default screen. **Similar functionality is found on menu button from the remote control.**

1st press – will allow to change the active input. Screen changes as below. Now you can use the +/- buttons to select a different input.

```
┌──────────────────────────┐
│        INPUT             │
│      COAXIAL             │
│                          │
│  Linear        -30.0dB   │
└──────────────────────────┘
```

```
┌──────────────────────────┐
│         XLR              │
│        INPUT             │
│                          │
│  Linear        -30.0dB   │
└──────────────────────────┘
```

After pressing +/- buttons, input has changed. Navigate through input list to select the desired input. Available options are Coaxial, XLR, USB, HD-Link1 and HD-Link2. You can continue to navigate in the menu by a further short press on the menu button, or you can exit the menu with a long press.

2nd press – will allow to select the digital filter response. The screen changes as below.

```
┌──────────────────────────┐
│        FILTER            │
│        LINEAR            │
│                          │
│  Linear        -30.0dB   │
└──────────────────────────┘
```

```
┌──────────────────────────┐
│       MINIMUM            │
│        FILTER            │
│                          │
│  Minimum       -30.0dB   │
└──────────────────────────┘
```

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Filter type changes if +/- buttons are pressed. Available options are Linear, Minimum, Hybrid and Off. You can navigate further in the menu with a further short press or exit by long press.

3rd press – will allow the change of the absolut phase of the output signal. See below screens.

```
┌─────────────────────────┐
│        PHASE            │
│       NORMAL            │
│  Minimum    -30.0dB     │
└─────────────────────────┘
```

```
┌─────────────────────────┐
│        INVERT           │
│        PHASE            │
│  Minimum    -30.0dB     │
└─────────────────────────┘
```

After pressing the +/- buttons, phase is changed. Available options are Normal and Invert. You can further navigate in the menu with a short press or exit with a long press.

4th press – will allow enable or disable the dither generator. The screen will change as below.

```
┌─────────────────────────┐
│        DITHER           │
│         ON              │
│  Minimum    -30.0dB     │
└─────────────────────────┘
```

```
┌─────────────────────────┐
│         OFF             │
│        DITHER           │
│  Minimum    -30.0dB     │
└─────────────────────────┘
```

Dither setting changed. Available options are On and Off. You can further navigate in the menu with a short press or exit with a long press.

5th press – will allow to alter the digital PLL settings. The screen appears as below.

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```
 ┌──────────────────────┐
 │       CLOCK          │
 │       STREAM         │
 │  Minimum    -30.0dB  │
 └──────────────────────┘

 ┌──────────────────────┐
 │       LOCAL          │
 │       CLOCK          │
 │  Minimum    -30.0dB  │
 └──────────────────────┘
```

PLL clock settings after change. Avalable options are Stream and Local. You can further navigate in the menu with a short press or exit with a long press.

A **6th press** will go the input change menu. Long press to exit.

VOLUME CONTROL

While in default screen, the +/- buttons will allow direct change of the volume setting. Default volume setting is -30 dB. The volume can be changed with a resolution of 0.5 dB steps, from -127.5 dB (minimum) to 0 dB (maximum). When volume setting is changed, a temporary screen is displayed like below.

```
 ┌──────────────────────┐
 │      -12.5 dB        │
 │      VOLUME          │
 │  Minimum    -12.5dB  │
 └──────────────────────┘
```

DISPLAY INTENSITY

Display intensity can be altered by direct press on the DISP button [(3) on front view]. There are 8 brightness levels, available in cycle.

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USB CONFIGURATION

Rockna Wavedream DAC is up-to-date with all available resolution formats. For the computer playback side, please consider the following informations.

Recommended software players:

1) Foobar2000
2) Jriver
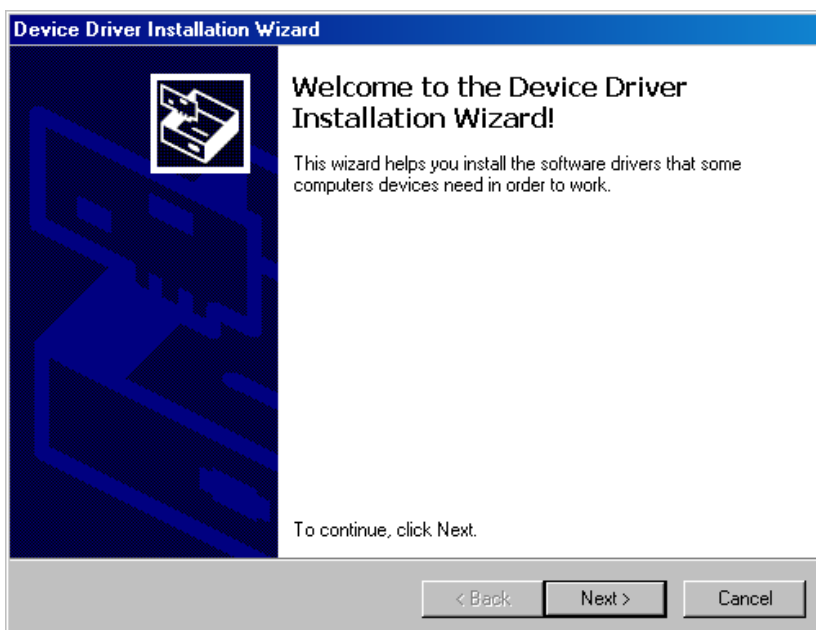3) Jplay
4) Audiogate
5) Audirvana Plus

Under Win XP environment, kernel streaming (KS) is recommended for PCM, and ASIO for DSD playback.
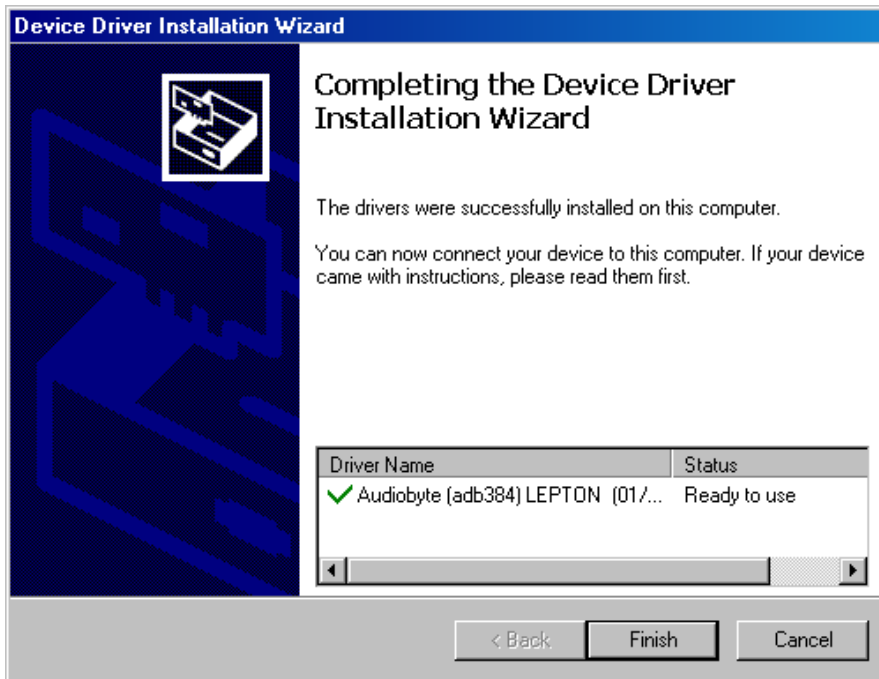Under W7/8 environment, WASAPI or ASIO mode is recommended for both PCM and DSD playback.

USB Driver Installation Details (Windows XP 32/64, Windows 7 32/64)

Do not connect the USB cable to the computer before driver installation! If you have already connected the dac to the PC, click Cancel on the screen that has showed up and remove the USB cable.
1. Go to product's page on www.rockna-line.com
2. Download the compatible drivers.
3. Unpack zip archive.
4. Enter your OS folder.
5. Launch Setup32.exe for 32bit OS or Setup64.exe for 64bit OS.
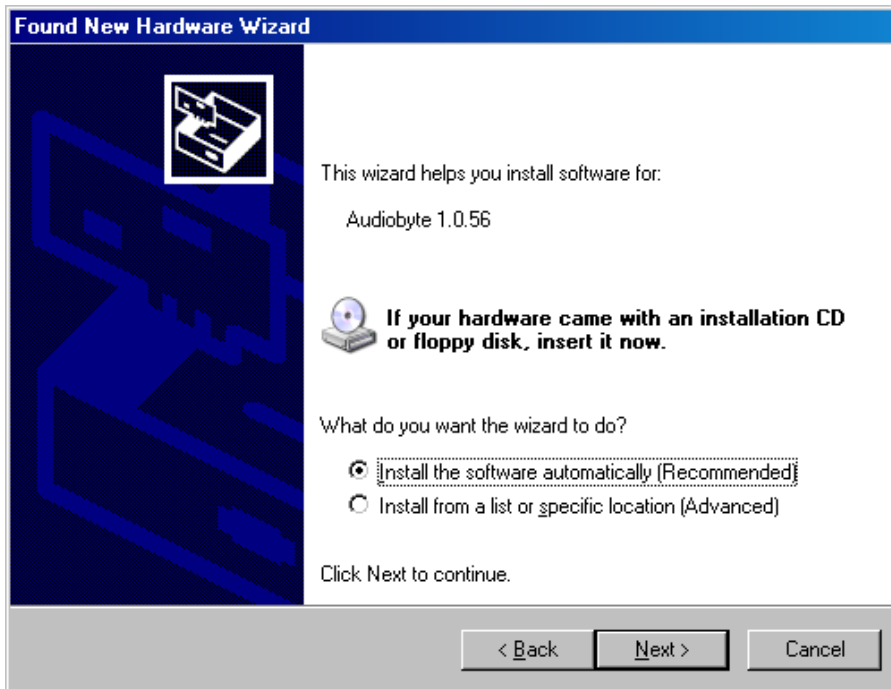6. After the application launches, click Next:

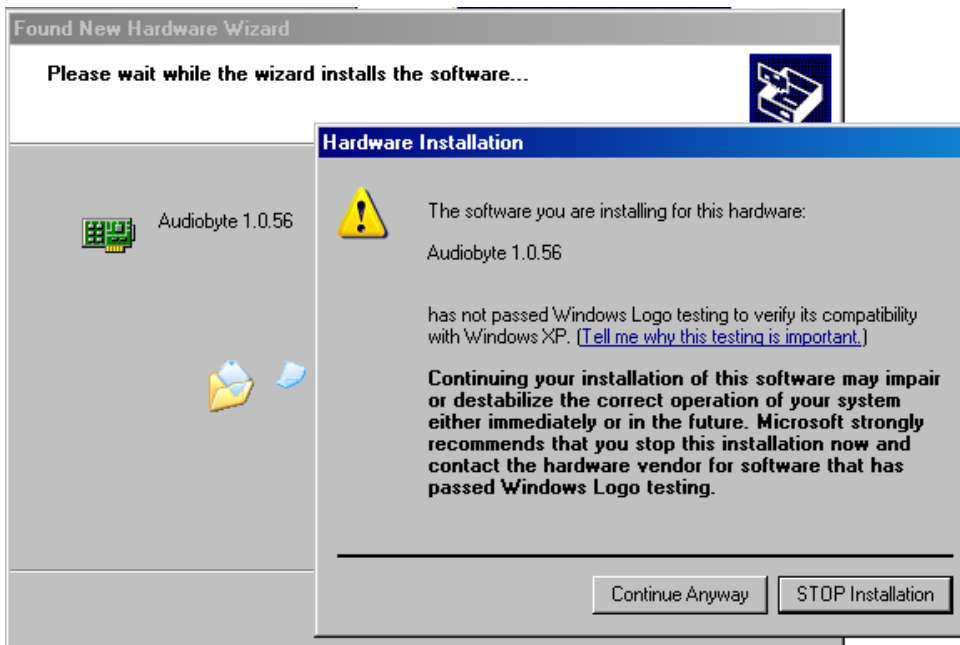7. Wait for the driver to be copied and then click Finish:

8. Connect the dac to the PC. In the dialog below, select "No, not this time" and then click "Next".
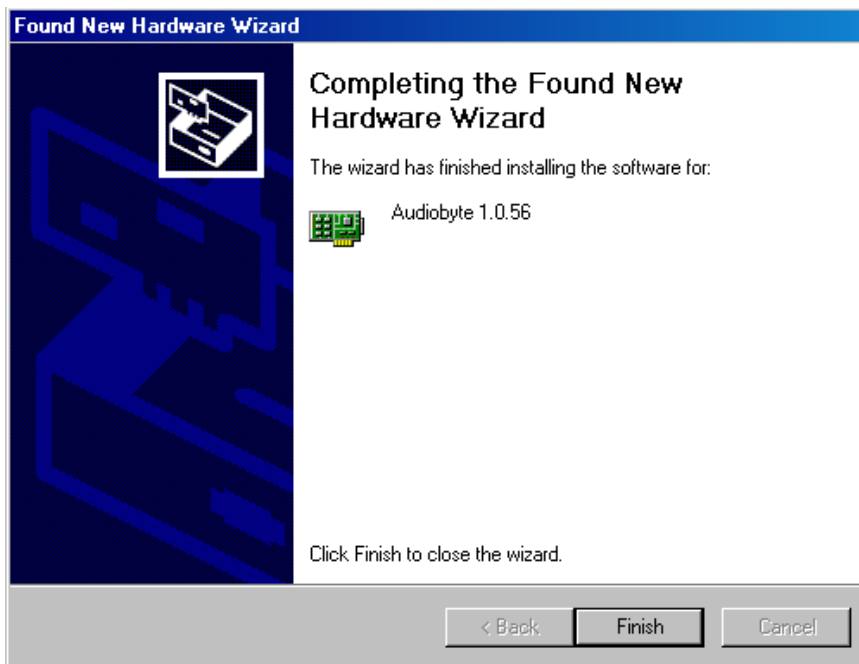
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9. In the new window select "Install the software automatically" and click "Next".

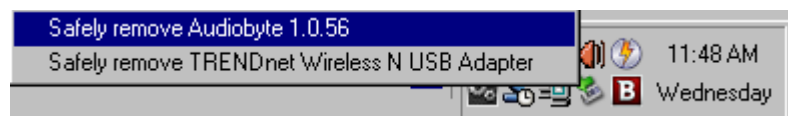10. Click the "Continue Anyway" button.

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11. Wait for the files to be copied and click "Finish".

Select Audiobyte Kernel Streaming as output device in your music player or Windows(Control Panel->Sounds and Audio Devices->Audio->Sound playback).

To adjust device volume, open Start->Programs->Accessories->Entertainment->Volume Control, enter Options->Properties, select Audiobyte Kernel Streaming as Mixer device, select all volume controls and click OK.

Using the Safely Remove Hardware icon in your taskbar before unplugging the USB cable prevents your system from becoming unstable. If the device cannot be removed, stop the playback and exit the applications that may use it as an output.

FIRMWARE UPDATE

It is straightforward to update the firmware of the DAC. Just follow the steps below.

1. Set the dac input on USB.
2. Make sure that on the PC side the playback is bitperfect.
3. Acces the Rockna firmware page : www.rockna-audio.com/login
4. If you don't have the access credentials, please contact us.
5. Download the and unpack the chosen zip file.
6. Play the special .wav update track

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7. During the update process , you will see "UPDATE /Writing" on display.
8. When update is done, you will see "UPDATE/ Done" on display.
9. You can now reboot the dac and check on startup screen the new firmware revision.

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10. **ROCKNA LIMITED WARRANTY**
THREE (3) YEARS

WARRANTY COVERAGE:
ROCKNA warranty obligation is limited to the terms set forth below.

WHO IS COVERED:
Rockna warrants the product to the original purchaser or the person receiving the product as a gift against defects in materials and workmanship as based on the date of original purchase("Warranty Period") from an Authorized Dealer. The original sales receipt showing the product name and the purchase date from an authorized retailer is considered such proof.

WHAT IS COVERED:
The Rockna warranty covers new products if a defect arises and a valid claim is received by Rockna within the Warranty Period. At its option, Rockna will either (1) repair the product at no charge, using new or refurbished replacement parts, or (2)exchange the product with a product that is new or which has been manufactured from new, or serviceable used parts and is at least functionally equivalent or most comparable to the original product in Rockna current inventory, or (3) refund the original purchase price of the product. Rockna warrants replacement products or parts provided under this warranty against defects in materials and workmanship from the date of the replacement or repair for ninety (90) days or for the remaining portion of the original product's warranty, whichever provides longer coverage for you. When a product or part is exchanged, any replacement item becomes your property and the replaced item becomes Rockna's property.When a refund is given, your product becomes Rockna's property.

Note: Any product sold and identified as refurbished or renewed carries a ninety (90) day limited warranty. Replacement product can only be sent if all warranty requirements are met. Failure to follow all require-ments can result in delay.
WHAT IS NOT COVERED - EXCLUSIONS AND LIMITATIONS:

This Limited Warranty applies only to the new products manufactured by or for Rockna that can be identified by the trade-mark, trade name, or logo affixed to it. This Limited Warranty does not apply to any non-Rockna hardware product or any software, even if packaged or sold with the product. Non-Rockna manufacturers, suppliers, or publishers may provide a separate warranty for their own products packaged with the bundled product. Rockna is not liable for any damage to or loss of any programs, data, or other information stored on any media contained within the product, or any non-Rockna product or part not covered by this warranty. Recovery or reinstallation of programs, data or other information is not covered under this Limited Warranty.

This warranty does not apply (a) to damage caused by accident, abuse, misuse, misapplication, or non-Rockna product, (b) to damage caused by service performed by anyone other than Rockna or Rockna Authorized Service Location, (c) to a product or a part that has been modified without the written permission of Rockna, or (d) if any Rockna serial number has been removed or defaced, or (e) product, accessories or consumables sold "AS IS" without warranty of any kind by including refurbished Rockna product sold "AS IS" by some retailers.

This Limited Warranty does not cover:
• Shipping charges to return defective product to Rockna.
• Labor charges for installation or setup of the product, adjustment of customer controls on the product, and installation or repair of antenna systems outside of the product.
• Product repair and/or part replacement because of improper installation, connections to improper voltage supply, abuse, neglect, misuse, accident, unauthorized repair or other cause not within the control of Rockna.
• Damage or claims for products not being available for use, or for lost data or lost software.
• Damage occurring to product during shipping.

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• A product that requires modification or
adaptation to enable it to operate in any country
other than the country for which it was designed,
manufactured, approved and/orauthorized, or
repair of products damaged by these
modifications.
• A product used for commercial or institutional
purposes (including but not limited to rental
purposes).
• Product lost in shipment and no signature
verification receipt can be provided.
• Failure to operate per Owner's Manual.

REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE
REMEDY FOR THE CONSUMER. ROCKNA SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR
CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON
THIS PRODUCT. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY
IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE
ON THIS PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

Some states do not allow the exclusions or limitation of incidental or consequential damages, or allow
limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to
you.

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Document version and performed modifications:

Version	Date	Description
1.00	17-03-2014	Initial release