

## **N264 - 76 Key Music Workstation**

How can I create my own Combinations?

How can I change the tempo in the middle of the song?

What are the bank change values?

Can I route sounds to the Individual outputs?

## Basics of Combination Writing for N364/N264, X3/X2/X3R

As there are potentially limitless possibilities when writing a Combination, the intent of this document is not to serve as a step by step, but rather to familiarize the user with the tools used in creating typical Combination setups. We will first discuss the basic elements that create such setups as Splits and Layers, then apply those basics to create a simple combination, which will illustrate both a split and layer, consisting of a bass on the left hand and piano and strings on the right.

Let's start with the basics:

- A **Combination** is a setup that combines 2 or more Programs, hence the name.
- In **Combination Edit Mode**, you can change settings for a Combination. You can get to the Combination Edit Mode by pressing the COMBI button, then the EDIT button. You can move up and down through the various screens of this mode with the up and down directional buttons, located to the right of the screen.
- A Combination has 8 **Timbres**, or areas that can hold a sound.
- You can select one sound for each Timbre, but it is not necessary to use all eight. You can assign a sound to a Timbre on **screen 1A** in the Combination Edit Mode.
- Timbres can be switched On or Off . If a Timbre is on, you can hear the sound on it. If it's off, the Timbre will not play, even if a sound has been selected. The best way to turn on a Timbre is to set its "channel" to "1G". This is done on **screen 3a** of the Combination Edit Mode.
- You can place sounds either on top of one another (A **Layer**), or set them to play on specified areas of the keyboard (A **Split**). In other words, if you assign two sounds over the same range of keys, both sounds will be heard when you play in that range. This is the characteristic of a Layer. If two different sounds reside over different areas of the keyboard, and never cross each other, it's a Split.
- Keep in mind that each Timbre includes a separate set of information for the sound it carries. Things like Pitch, Transpose, Volume and Pan. These aside, the two most important settings for our purposes are called **Key Window Top** and **Key Window Bottom**, which are located on **screens 4a** and **4b** in the Combination Edit Mode. Think of Key Windows as barriers for where a sound can be heard:
- **When playing, a Timbre won't sound ABOVE the note selected in Key Window Top.**
- **When playing, a Timbre won't sound BELOW the note selected in Key Window Bottom.**
- In other words, setting a Key Window Top and Bottom for any given Timbre tells the keyboard that only those notes and what's in between them will play the sound on that Timbre. This gives you the flexibility to decide what range of the keyboard a sound will play on.
- You can set the Key Windows precisely by key, giving you any possibility of ranges for any given Timbre. Below is a 61 keyboard, with the name for each key, as it would appear in the Key Windows:
- Each key has a note and a number for which octave it appears in. So, let's say you wanted the first

C#2	Eb2	F#2	Ab2	Bb2	C#3	Eb2	F#3	Ab3	Bb3	C#4	Eb4	F#4	Ab4	Bb4	C#5	Eb5	F#5	Ab5	Bb5	C#6	Eb6	F#6	Ab6	Bb6											
C2	D2	E2	F2	G2	A2	B2	C3	D3	E3	F3	G3	A3	B3	C4	D4	E4	F4	G4	A4	B4	C5	D5	E5	F5	G5	A5	B5	C6	D6	E6	F6	G6	A6	B6	C7

Timbre to play only on the first two octaves. You'd set the Key Window Bottom to C2, and the Key Window Top to C4. Now, the first Timbre will only play on C2, C4 and the key span in between... Setting Timbre two's Key Window Bottom to D4 and Top to C7 will cover the rest of the keyboard with another sound. Now you have a Split!! Setting up Timbre three with the same Key Windows as Timbre two, will play the two sounds together... a Layer!!!

**Now that you have the basics, let's apply what we've learned to create a Combination. First, we'll get into the edit mode:**

1. Press the COMBI button to enter the Combination mode.
2. Press the EDIT button to enter the Combination Edit mode.

**Next, we'll initialize the Combination, so that all of the parameters are reset:**

1. Press the 8 button on the left-hand side of the keyboard. (It's also marked "Effect Speed").
2. Push the up directional button on the right-hand side of the screen two times. This will bring you to page 8C - "Init Combi".
3. Press the YES button on the left-hand side of the screen twice. This will reset the Combination for editing.

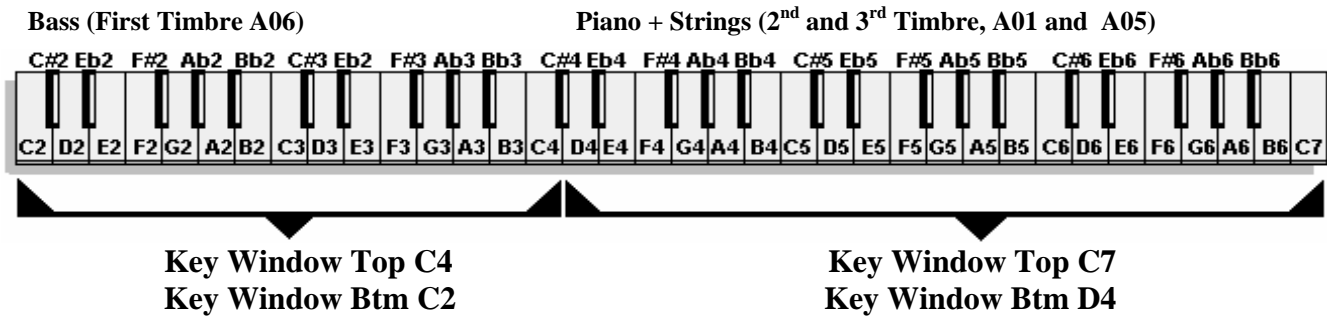
**Now, we'll select the sounds for our setup:**

1. Press the "1" button on the left-hand side of the unit (It's also marked "Octave Type"). This will take you to screen 1A "Program 1-4". Here, you can see and select sounds for the first four Timbres.
2. Using the value slider or YES/NO buttons, set the first Timbre to "A06" (NuFretless). This will be our Bass sound for the left hand.
3. Press the right directional button once to highlight the sound for the second Timbre.
4. Using the value slider or YES/NO buttons, set the second Timbre to "A01" (N Piano). This will be our first sound for the right hand.
5. Press the right directional button once again to highlight the sound for the third Timbre.
6. Using the value slider or YES/NO buttons, set the third Timbre to "A05" (N Strings). This will be our other sound for the right hand.

**Next, we'll turn those three Timbres on:**

1. Press the "3" button on the left-hand side of the unit (It's also marked VDF EG Octave) This will take you to screen 3A "Channel". The first Timbre should already be set to "1G".
2. Timbre three should be highlighted from selecting the sounds on the previous screen. Press the left directional button once, so that the second Timbre's channel setting is highlighted.
3. Using the value slider or YES/NO buttons, set the second Timbre to "1G".
4. Press the right directional button once again to highlight the third Timbre.
5. Using the value slider or YES/NO buttons, set the third Timbre to "1G".

**Now, we'll tell each sound where it should play. Here's how it's going to be set up:**



1. Press the "4" button on the left-hand side of the keyboard. (It's also marked "Attack Gate"). This will bring you screen 4A - "KW TOP" - This is the Key Window Top page. Here, you can see the Key Window Top for the first four Timbres.
2. The third Timbre should be highlighted from selecting the channels on the previous screen. Press the left directional button twice to highlight the first Timbre.
3. Using the value slider or YES/NO buttons, set the Key Window Top for the first Timbre to "C4".
4. Press the up directional button. This will take you to screen 1B - "KW BTM" - This is the Key Window Bottom page.
5. Using the value slider or YES/NO buttons, set the Key Window Bottom for the first Timbre to "C2".

#### **Now, the Piano (Timbre 2):**

1. Press the down directional button once again, to get back to the Key Window Top screen.
2. Press the right directional button once to highlight the Key Window Top for the second Timbre.
3. Using the value slider or YES/NO buttons, set the Key Window Top for the second Timbre to "C7".
4. Press the up directional button once again, to get back to the Key Window Bottom page.
5. Using the value slider or YES/NO buttons, set the Key Window Bottom for the second Timbre to "D4".

#### **And, finally, the Strings (Timbre 3):**

1. Press the down directional button one more time, to get back to the Key Window Top page.
2. Press the right directional button once more to highlight the Key Window Top for the third Timbre.
3. Using the value slider or YES/NO buttons, set the Key Window Top for the third Timbre to "C7".
4. Press the up directional button once more, to get back to the Key Window Bottom page.
5. Using the value slider or YES/NO buttons, set the Key Window Bottom for the third Timbre to "D4".

**You'll notice when you play that Bass is on the left hand exclusively, and the Piano and Strings are doubled up on the right. Now that you have your Split/Layer Combination, all that's left to do is save your work:**

1. Press the "8" button on the left-hand side of the units (It's also marked "Effect Speed"). This will take you to screen 8a - "Comb Write" - The Combination write screen.
2. Press the right directional button once to highlight "OK?"
3. Press the YES button twice. This will permanently write your newly edited Combination.

Press the COMBI button to exit the Combination Edit mode.



### Creating a Tempo Change - N364/N264, X3/X2

**To change the tempo in the middle of a song:**

1. Press the SEQ button to enter the Sequencer mode.
2. Press the EDIT button to enter the Sequencer Edit mode.
3. Press the CHANNEL button (Marked in green on the left side of the keyboard).
4. Press the CURSOR up button 3 times. The screen will display "3D Create Ctl".

**You will need to set the Start and End measures that the tempo will be affected on. You can either make a gradual or abrupt tempo change, depending on the "distance" between the Start and End measure you select. The tempo changes gradually from the original tempo to the new tempo in the time given between the Start and End measure. The closer they are in number, the faster the tempo change will take place. If the Start and End measure are set the same, the tempo change will be instant.**

5. Press the RIGHT cursor button once to highlight the parameter "M001".
6. Using the value slider or buttons, select the measure that the tempo should change on.
7. Press the RIGHT cursor button twice more to highlight the next parameter "M001".
8. Using the value slider or buttons, select the measure that the tempo change should finish taking place on.
9. Press the RIGHT cursor button twice more to highlight the tempo parameter.
10. Using the value slider or buttons, select the tempo.
11. Press the RIGHT cursor button once more to highlight "O.K.".
12. Press the YES button twice.
13. Press the SEQ button to exit mode.
14. Press the TEMPO button
15. Press the RIGHT cursor button once more to highlight "MAN" (Manual Tempo).
16. Using the value slider or buttons, select "AUT" (Auto Tempo Read).



## Bank Change Messages For Korg Products

Most sequencers have an event edit mode, which allows inputting controller messages. Bank change messages require these events: Beat one, tick one: Controller 0 with its value - Beat one, tick two: Controller 32 with its value - Beat one, tick three: Program change. Make sure that Program Change and Exclusive filters are set to enable (ENA) to receive these commands. Note: These listing covers all possible bank changes in the product lines specified for each chart. Since some models don't have all of the mentioned banks, some messages will not be received.

### X Series/N364/264/Trinity Series/ Z1/Z1EX

BANK A			BANK B			BANK C		
Message	Value		Message	Value		Message	Value	
Controller 0	0		Controller 0	0		Controller 0	0	
Controller 32	0		Controller 32	1		Controller 32	2	
Program Change	0-99 (0-127)		Program Change	0-99 (0-127)		Program Change	0-99 (0-127)	
BANK D			BANK S/M (Trinity)			GM BANK (X and N Series)		
Message	Value		Message	Value		Message	Value	
Controller 0	0		Controller 0	0		Controller 0	56	
Controller 32	3		Controller 32	4		Controller 32	0	
Program Change	0-99 (0-127)		Program Change	0-99 (0-127)		Program Change	1-128	
			GM DRUM BANK (X and N Series)					
Message	Value		Message	Value				
Controller 0	62		Controller 0	62				
Controller 32	0		Controller 32	0				
Program Change	*		Program Change	*				

### Triton Classic/Studio/Extreme/Rack/Le/Karma

BANK INT-A				BANK INT-B				BANK INT-C			
Message	Value			Message	Value			Message	Value		
Bank Map	(GM)	(Korg)		Bank Map	(GM)	(Korg)		Bank Map	(GM)	(Korg)	
Controller 0	63	0		Controller 0	63	0		Controller 0	63	0	
Controller 32	0	0		Controller 32	1	1		Controller 32	2	2	
Program Change	0-127	0-127		Program Change	0-127	0-127		Program Change	0-127	0-127	
BANK INT-D				BANK INT-E				BANK INT-F			
Message	Value			Message	Value			Message	Value		
Bank Map	(GM)	(Korg)		Bank Map	(GM)	(Korg)		Bank Map	(GM)	(Korg)	
Controller 0	63	0		Controller 0	63	0		Controller 0	63	0	
Controller 32	3	3		Controller 32	4	4		Controller 32	5	5	
Program Change	0-127	0-127		Program Change	0-127	0-127		Program Change	0-127	0-127	

<b>BANK EXB-A</b>			<b>BANK EXB-B</b>			<b>BANK EXB-C</b>		
<i>Message</i>	<i>Value</i>		<i>Message</i>	<i>Value</i>		<i>Message</i>	<i>Value</i>	
Bank Map	(GM)	(Korg)	Bank Map	(GM)	(Korg)	Bank Map	(GM)	(Korg)
Controller 0	63	0	Controller 0	63	0	Controller 0	63	0
Controller 32	8	8	Controller 32	9	9	Controller 32	10	10
Program Change	0-127	0-127	Program Change	0-127	0-127	Program Change	0-127	0-127
<b>BANK EXB-D</b>			<b>BANK EXB-E</b>			<b>BANK EXB-F</b>		
<i>Message</i>	<i>Value</i>		<i>Message</i>	<i>Value</i>		<i>Message</i>	<i>Value</i>	
Bank Map	(GM)	(Korg)	Bank Map	(GM)	(Korg)	Bank Map	(GM)	(Korg)
Controller 0	63	0	Controller 0	63	0	Controller 0	63	0
Controller 32	11	11	Controller 32	12	12	Controller 32	13	13
Program Change	0-127	0-127	Program Change	0-127	0-127	Program Change	0-127	0-127
<b>BANK EXB-G</b>			<b>BANK EXB-H</b>			<b>GM BANK</b>		
<i>Message</i>	<i>Value</i>		<i>Message</i>	<i>Value</i>		<i>Message</i>	<i>Value</i>	
Bank Map	(GM)	(Korg)	Bank Map	(GM)	(Korg)	Bank Map	(GM)	(Korg)
Controller 0	63	0	Controller 0	63	0	Controller 0	56 or 121	56 or 121
Controller 32	14	14	Controller 32	15	15	Controller 32	0	0
Program Change	0-127	0-127	Program Change	0-127	0-127	Program Change	0-127	0-127
<b>GM DRUM BANK</b>			<b>GM2 (Banks 1 through 9)</b>					
<i>Message</i>	<i>Value</i>		<i>Message</i>	<i>Value</i>				
Bank Map	(GM)	(Korg)	Bank Map	(GM)	(Korg)			
Controller 0	62 or 120	62 or 120	Controller 0	121	121			
Controller 32	0	0	Controller 32	1-9	1-9			
Program Change	(See GM Drum Program Conversion chart)		Program Change	0-127	0-127			

### i-Series (i5, i5M i3, i2, i1, iX300, XC Series)

<b>BANK A/B</b>		<b>BANK C/D</b>		<b>BANK E/F,User</b>		<b>DRUMS Dr1-Dr8</b>	
<i>Message</i>	<i>Value</i>	<i>Message</i>	<i>Value</i>	<i>Message</i>	<i>Value</i>	<i>Message</i>	<i>Value</i>
Controller 0	0	Controller 0	0	Controller 0	0	Controller 0	0
Controller 32	0	Controller 32	1	Controller 32	2	Controller 32	3
Program Change	0-127	Program Change	0-127	Program Change	0-127	Program Change	0-7
(Numbers: 0-63 = A11-A88, 64-127 = B11-88)		(Numbers: 0-63 = C11-C88, 64-127 = D11-D88)		(Numbers: 0-63 = E11-E88, 64-127 = F11-F88)		(Numbers: 0-7 = Dr1-Dr8)	

### iS-Series/i40M

<b>BANK A/B</b>		<b>BANK C/D</b>		<b>BANK E/F User-Drum</b>	
<i>Message</i>	<i>Value</i>	<i>Message</i>	<i>Value</i>	<i>Message</i>	<i>Value</i>
Controller 0	0	Controller 0	0	Controller 0	0
Controller 32	0	Controller 32	1	Controller 32	2
Program Change	0-127	Program Change	0-127	Program Change	0-127
(Numbers: 0-63 = A11-A88, 64-127 = B11-88)		(Numbers: 0-63 = C11-C88, 64-127 = D11-D88)		(Numbers: 0-63 = E11-E88, 64-127 = F11-F88)	

### I30

<b>BANK A/B</b>		<b>BANK C/D</b>		<b>BANK E</b>	
<i>Message</i>	<i>Value</i>	<i>Message</i>	<i>Value</i>	<i>Message</i>	<i>Value</i>
Controller 0	0	Controller 0	0	Controller 0	0
Controller 32	0	Controller 32	1	Controller 32	2
Program Change	0-127	Program Change	0-127	Program Change	0-63
(Numbers: 0-63 = A11-A88, 64-127 = B11-88)		(Numbers: 0-63 = C11-C88, 64-127 = D11-D88)		(Numbers: 0-63 = E11-E88)	

<b>BANK F</b>		<b>BANK G</b>		<b>BANK R (Drums)</b>	
<i>Message</i>	<i>Value</i>	<i>Message</i>	<i>Value</i>	<i>Message</i>	<i>Value</i>
Controller 0	0	Controller 0	0	Controller 0	0
Controller 32	3	Controller 32	3	Controller 32	4
Program Change	0-63	Program Change	64-127	Program Change	0-127
(Numbers: 0-63 = F11-F88)		(Numbers: 64-127 = G11-G88)			
<b>*i30 GM Drum Bank Program Change Conversion</b>					
Program Changes		Drum Kits			
00 - 15 -- Dr 11		120 -- Dr 21			
16 - 17 -- Dr 12		121 -- Dr 22			
25 -- Dr 13		122 -- Dr 23			
32 - 39 -- Dr 14		123 -- Dr 24			
40 -47 -- Dr 15		124 -- Dr 25			
64 - 71 -- Dr 16		125 -- Dr 26			
26 - 31 -- Dr 17		126 -- Dr 27			
48 - 55 -- Dr 18		127 -- Dr 28			

### N5EX/N1/N1R/NS5R/NX5R Bank Changes

<b>Bank Name</b>	<b>Bank Select (MSB:LSB)</b>
GM-a	00:00(GS/XG)
	00:01(GS)
r:01	01:xx
r:02	02:xx
r:03	03:xx
r:04	04:xx
r:05	05:xx
r:06	06:xx
r:07	07:xx
r:08	08:xx
r:09	09:xx
r:10	10:xx
r:11	11:xx
r:16	16:xx
r:17	17:xx
r:18	18:xx
r:19	19:xx
r:24	24:xx
r:25	25:xx
r:26	26:xx
r:32	32:xx
r:33	33:xx
r:40	40:xx
r:CM	125:xx
	127:xx(GS)
y:01	00:01(XG)
y:03	0:03
y:06	0:06
y:08	0:08
y:12	00:12
y:14	00:14
y:16	0:16
y:17	0:17
y:18	0:18
y:19	0:19
y:20	0:20

<b>Bank</b>	<b>Bank Select</b>
y:24	0:24
y:25	0:25
y:27	00:27
y:28	00:28
y:32	0:32
y:33	0:33
y:34	0:34
y:35	0:35
y:36	0:36
y:37	0:37
y:38	0:38
y:39	0:39
y:40	0:40
y:41	0:41
y:42	00:42
y:43	00:43
y:45	00:45
y:64	0:64
y:65	0:65
y:66	0:66
y:67	0:67
y:68	0:68
y:69	0:69
y:70	0:70
y:71	0:71
y:72	0:72
y:96	00:96
y:97	00:97
y:98	00:98
y:99	00:99
y100	00:100
y101	00:101
ySFX	64:xx
GM-b	56:00
	57:00(05)
PrgU	80:xx
PrgA	81:xx

<b>Bank Name</b>	<b>Bank Select (MSB:LSB)</b>
PrgB	82:xx
PrgC	83:xx
CmbU	88:xx
CmbA	89:xx
CmbB	90:xx
CmbC	91:xx
yDr1	126:xx
yDr2	127:xx(XG)
	120:xx(XG)
rDrm	61:xx
	120:xx(GS)
kDrm	62:xx
	120:xx(05)
****	63:xx

- \* (GS) : after GS Reset
- \* (XG) : after XG System ON
- \* (05) : 05R/W Ma



**N5EX/N1/N1R/NS5R/NX5R Drum Banks**

<b>'yDr2' Bank</b> (Bank MSB=127) Drum Kit List (Drum Bank)		<b>'rDrm' Bank</b> (Bank MSB=61) Drum Kit List (Drum Bank)		<b>'kDrm' Bank</b> (BankMSB=62) Drum Kit List (Drum Bank)	
<u>Program No.</u>	<u>Drum Kit Name</u>	<u>Program No.</u>	<u>Drum Kit Name</u>	<u>Program No.</u>	<u>Drum Kit Name</u>
(PC# xxh)		(PC# xxh)		(PC# xxh)	
1 (00h)	Standard	1 (00h)	STANDARD	1(00h)...16(0Eh)	GM Kit
2 (01h)	Standard	2 (01h)	STANDARD	17(10h)...24(17h)	Power Kit
9 (08h)	Room	9 (08h)	ROOM	25(18h)	Dance Kit
17 (10h)	Rock	17 (10h)	POWER	26(19h)	Analog Kit
25 (18h)	Electro	25 (18h)	ELECTRONIC	27(1Ah)...32(1Fh)	Dance Kit
26 (19h)	Analog	26 (19h)	ANALOG	33(20h)...40(27h)	Jazz Kit
33 (20h)	Jazz	27 (1Ah)	DANCE	41(28h)...48(2Fh)	Brush Kit
41 (28h)	Brush	33 (20h)	JAZZ	49(30h)...56(37h)	Orch Kit
49 (30h)	Classic	41 (28h)	BRUSH	57(38h)...64(3Fh)	GM Kit
		49 (30h)	ORCHESTRA	65(40h)...72(47h)	Perc Kit
<b>'yDr1' Bank</b> (Bank MSB=126) Drum Kit List (Drum Bank)		50 (31h)	ETHNIC	73(48h)	User Kit 1
<u>Program No.</u>	<u>Drum Kit Name</u>	51 (32h)	KICK&SNARE	74(49h)	User Kit 2
(PC# xxh)		57 (38h)	SFX	75(4Ah)..128(7Fh)	GM Kit
1 (00h)	SFX 1	128 (7Fh)	C/M		
2 (01h)	SFX 2				



## Output Routing in the Sequencer: N364/ N264 and X Series

**Before you can actually reroute the tracks to the 3<sup>rd</sup> and 4<sup>th</sup> outputs:**

1. Press the SEQ button to enter the Sequencer mode.
2. Press the EDIT button to enter the Sequencer Edit mode.
3. Press the Up Cursor several times until you are on page 7E: "Effects Placement".
4. Using the value slider or buttons, select "Parallel Sub" as the routing.
5. Press the down cursor 2 times to arrive at page 7C. These are parameters for Effect 2
6. Using the value slider or buttons, select "00" for the effect number. This will set Effect 2 to "No effect".
7. Press the down cursor 2 more times to arrive at page 7A. These are parameters for Effect 1.
8. Using the value slider or buttons, select "00" for the effect number. This will set Effect 1 to "No effect".

**Now that you have set up the routing, all that's left to do is set up the tracks that you wish to reroute to either 3, 4 or both. Follow these steps for each track that you wish to have alternate routing:**

1. Press the SEQ button to exit out of the Sequencer Edit mode.
2. Press the button marked TRACK (in green) on the left side of the keyboard.
3. Using the value slider or buttons, select the track you wish to reroute.
4. Press the right cursor button 3 times to highlight the Pan Parameter for that track.
5. Using the value slider or buttons, set the Pan to "OFF". This stops the sound from coming out of either output 1 or 2.
6. Press the EDIT button to re-renter the Sequencer Edit mode.
7. Press the button marked MEASURE (in green) on the left side of the keyboard. This will take you to the "Send C/D" page.

**Send C and Send D will actually become the volumes for output to 3 and 4 respectively. The higher you set either of these, for a track, the more signal you will hear out of the 3<sup>rd</sup> and/or 4<sup>th</sup> outputs for that track. To use Sends C and D:**

1. Using the value slider or buttons, select the track that you wish to reroute to either 3 or 4.
2. Use the right or left cursor buttons to highlight the setting for either Send C or D.
3. Using the value slider or buttons, set the level of output for that Send. You will now hear signal from the outputs as you specified.

**Remember to repeat these steps for each track that you wish to reroute.**

