

## USB T3 E3 Analyzer Quick Verification Guide

If this is the first-time use of GL's T3 E3 unit, then it is recommended to follow all the steps explained in USB-T3E3-Analyzer-Quick-Install-Guide before proceeding with the steps below.

## **Quick Steps**

 After successful installation of USB T3 E3 Analyzer Hardware, connect the Port #1 and Port #2 in loopback, i.e., Tx[Out] of Port 1 is connected to Rx[In] of Port 2 and Rx[In] of Port 1 is connected to Tx[Out] of Port 2 with BNC Cables.



• Double-click on the USB T3 E3 Analyzer (Analyzer) shortcut icon on the Desktop, the application should come up.



• On the **Card Setting** dialog, for **Port** #1 and **Port** #2, set the options as shown below.

Click on **down arrow** Mon the card setting dialog to see Port #2.

Rx Signal	Loopt	ack		Framing		Clock Source		Mode Selection		Port Selection	
Terminate	▼ None	R	-	C-Bit	-	Internal	-	Unstructured	•	Port 1	- ^
Terminate	▼ None		-	C-Bit	•	Internal	-	Unstructured	•	Port 2	Ŧ
File View Co	nfig Mor	itor Applic	cations	Help							
File View Co RxSignal	nfig Mor	itor Applic ack	cations	Help Framing		Clock Source		Mode Selection		Port Selection	1
File View Co Rx Signal Terminate	nfig Mor Loopt	itor Applic ack	cations	Help Framing Framed	•	Clock Source	<b>•</b>	Mode Selection	<b>_</b>	Port Selection	

- From the main window, select **Applications**  $\rightarrow$  **BERT** to invoke **Enhanced BERT** application.
- In the left pane, under **Port #1**, click on **Tx**. This will enable the Tx settings options for the user to edit the settings as required.
- In **Tx** settings, uncheck the option "Transmit Receive Coupled Settings (Tx=Rx)" and select the BER Patterns as **QRSS**.
- On **Port #1**, click on **Rx** and select the BER Patterns as **2^6-1**.
- On **Port #2**, click on Tx, uncheck the option
   "Transmit Receive Coupled Settings
   The set of the s

(Tx=Rx)" and select BER Patterns as  $2^{6-1}$ 

- On **Port #2**, click on **Rx** and select the BER Patterns as **QRSS**.
- In the left pane, select All Ports and click
   Start to start transmitting and receiving
   BER Patterns on both the ports.
- In the left pane, click on Results and observe that **PatSync** is being displayed on both the ports indicating hardware levels are working properly without any errors.

Bert		Enhanced BERT Untitled -	[Tx Rx Settings - All	I Ports]	
Bert	<u>File</u> <u>Actions</u>	<u>V</u> iew <u>W</u> indows <u>H</u> elp			_ 8 ×
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	Port #1	Result			
	Tx		_ lr	nsert Errors	
	Bx	Custom View   Configure Custom	stom View   Reset	Port #1 🔹 Logic Erro	r 💌 BPV 💌
	Result				
	Port #2	All Cards	Port #1	Port #2	
Ľ	Tx	Insert Logic Error	Insert Logic Error	Insert Logic Error	
	Bx	Insert BPV Error	Insert BPV Error	Insert BPV Error	
	Result	Status / Errors	PatSync	PatSync	
	Graph	Total Errors - Logic Errors	0	0	
	All Ports	Bipolar Violations	. 0	0	
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		- Bipolar Violations	0	0	
		- Frame Errors	0	Ő	
		Error Free Second - Logic Errors	39	39	
		Bipolar Violations	39	39	
		- Frame Errors	39	39	
		Loss Of Sync Count	0	0	
		Loss Of Sync Sec	0	0	
		Start Time	02/22/2016 - 18:48:12	02/22/2016 - 18:48:12	
		Elapsed Time	0-00:00:39	0-00:00:39	
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	Start Stop	<			>
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## GL Communications Inc.

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## Troubleshoot

If there are any problems while conducting the above test, please troubleshoot with the following steps:

• Ensure that the additional **Warranty License** has been installed or if the Warranty License has been installed already, please contact GL to renew the warranty license.

Error		×
8	The support warranty license has expired for basic software Please contact GL Communications Inc. if you need any assistance. Phone: (301) 670-4784 Fax: (301) 670-9187 Email: info@gl.com	
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- Check if the analyzer software invokes with the following alarm errors then, ensure that BNC cables are connected properly.
- Check if the Card settings for Rx Signal is set to Terminate mode, Loopback is set to None, Framing is set to C-Bit, Clock-Source is set to Internal, Mode Selection is set to Unstructured for both the ports and click on Reset All button on the Monitor #1 and Monitor #2 windows to get the sync on both the ports.
- If the optional software is not activated, you may have not installed the Hardware licenses properly. Install the Hardware licenses given in the USB Installation stick.
- Ensure that the Power Adapter is connected to the USB T3 E3 Analyzer and to the AC Power on the strip or Wall. Ensure that the Power Strip is ON.
- Make sure that the USB cable is securely connected to the USB T3 E3 Analyzer and to the USB port on PC.
- Follow the detailed instructions in the USB T3 E3 Analyzer Installation Guide.
- If you are still having issues or have any other related questions, please contact GL Communications Inc.

🗐 Por	<b>t</b> #1 💌	J. F	Port #2		
Alarms		Alarms			
🕖 LOS		🚺 🙋 LOS			
🕖 LOF		📔 🙋 LOF			
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		DLE 🧕 IDLE			
E RALZX-BIT		RAL/X-BIT			
EXCessive 0.2		Excessive L	S		
FEAC Message		FEAC Message			
Signal Input		Signal Input			
Freq (Hz) Level V	'p (dBdsx)	Freq (Hz) Lev	el Vp (dBdsx)		
		44 736 000	1.20 (4.7		
Errors		Errors			
Frame Errors	0	Frame Errors	C		
P-Bit Parity	0	P-Bit Parity	C		
C-Bit Parity	0	C-Bit Parity	C		
FEBE Errors	0	FEBE Errors	182128		
BPV	0	BPV	0		
Excessive 0's	0	Excessive 0's	(		
Log					
Start Stop	View	Start Stop	View		
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