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MODEL No. PBIB-360

PERIPHERAL BUS INTERFACE BOX

360 SYSTEMS DIGICART INTERFACE

USER MANUAL

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1. REVISION HISTORY

080703	Rev. 2.1	Revised INSTALLATION Section. Revised PBIB DIGICART RS422 ADAPTER in SPECIFICATIONS Section.
082003	Rev. 2.2	Company header information revised. Reformatted.
011504	Rev. 2.3	Added Front/Rear Views. Added DNF Controls Limited Warranty.
080504	Rev. 2.4	Added Setup Menu

Getting Started . . .

2. DESCRIPTION

The Peripheral Bus Interface Box (PBIB) gives the production switcher control over the 360 SYSTEMS DIGICART, Digital Audio Recorder.

Upon receipt of the Learn command from the production switcher, the PBIB saves the CUT ID of the currently loaded audio cut.

When the Recall command is received, the PBIB loads the “Learned” audio cut.

The Trigger function on the production switcher can be used to Play, Stop, Loop and Still the audio cut.

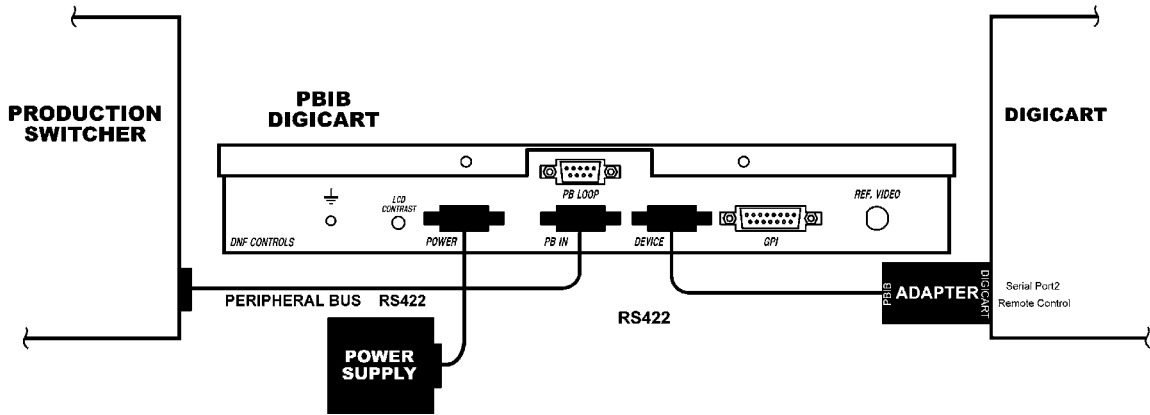
Learn & Recall may also be done directly from the PBIB, without the production switcher.

3. INSTALLATION

- a. Connect the Peripheral Bus from Production Switcher to the “PB IN” connector, on the rear of the Peripheral Bus Interface Box (PBIB) using a standard RS422, 9-pin cable.
- b. Connect the supplied “Digicart Adapter” to the “Serial Port2 Remote Control” connector on the rear of the 360 Systems DIGICART. The male end of the adapter, labeled “DIGICART” is plugged into the Digicart.
- c. Connect one end of a standard RS422 cable to the DEVICE connector on the rear of the PBIB. Connect the other end to the Digicart Adapter on the Digicart.
- d. Connect the female, 9-pin plug on the power supply to the “POWER” connector on the rear of the PBIB.
- e. Plug the power supply into 90 VAC – 240 VAC wall socket.

Installation complete.

Connection Diagram



4. SETUP

a. PARITY

Note: Parity type on the Production Switcher must be the same as on the PBIB.

- 1) Press **[SHIFT]** + **[v]** or **[SHIFT]** + **[^]**.
- 2) Press **[v]** or **[^]** until “Select Parity” is displayed on the top line of the display.
- 3) Press **[RUN]**.
- 4) Press **[v]** or **[^]** to select desired parity: Even, Odd or None.
- 5) Press the **[ESC]** key to leave the SETUP mode.

b. ADDRESS

Press the **[SHIFT]** + **[ADDR]** keys on the PBIB.
Use the **[^]** and **[v]** Arrow keys to select the Device Address.
Press **[ESC]** when done.

c. PRODUCTION SWITCHER TYPE

- 1) Press the **[SHIFT]** + **[^]** or **[SHIFT]** + **[v]**.
- 2) Press the **[^]** or **[v]** arrow keys until the words “SWITCHER TYPE” are displayed.
- 3) Press the **[RUN]** key.
- 4) The first row of the display shows the current production switcher type.
- 5) Press the **[^]** or **[v]** arrow keys to toggle between Grass Valley and Sony production switchers. (Default = Grass Valley)
- 6) Press the **[ESC]** key to leave the SETUP mode.

d. ON THE DIGICART

- 1) Press the SETUP MENU key.
- 2) Turn the DIGICART wheel until “REMOTE CONTROL” is displayed.
- 3) Use the LEFT and RIGHT arrow keys on the DIGICART to select ADDRESS 01.
- 4) Press the ENTER/YES key.
- 5) The top line of the PBIB display will show “DIGICART: OK” if the PBIB can successfully communicate with the DIGICART. The display will show “Digicart: Not OK” if there is a communications error. Check all connections and cables.

5. LEARN

a. LEARN ON THE DIGICART

Select the desired audio cut.

b. LEARN ON THE PRODUCTION SWITCHER

- 1) Select and enable the Peripheral Device Addresses for the PBIB.
- 2) Do a LEARN to the desired REGISTER.
- 3) The PBIB will save the currently selected CUT ID into the designated REGISTER number.
- 4) The bottom line of the display will show the REGISTER number and its contents.
The display on the PBIB will show “Learned it!” for 1 second.

c. LEARN ON THE PBIB

- 1) Select the REGISTER number using the [^] and [v] arrow keys.
The bottom line of the display shows the contents of the register.
- 2) On the DIGICART: Select the desired audio cut.
- 3) Press [SHIFT] + [LEARN] to save the audio cut into the register selected in step #1.
- 4) The display on the PBIB will show “Learned it!” for 1 second.
The bottom line of the display will show the REGISTER number and its contents.

6. RECALL

a. RECALL ON THE PRODUCTION SWITCHER

- 1) RECALL the desired REGISTER NUMBER.
The PBIB will automatically select the Learned audio cut.
- 2) The display on the PBIB will show “Recalled it!” for 1 second.
The bottom line of the display will show the REGISTER number and its contents.

b. RECALL ON THE PBIB

SELECT THE AUDIO CUT

- 1) Press the [^] and [v] arrow keys together.
The first line of the display will show the currently selected directory.
The second line of the display will say “Select directory.”
- 2) Use the [^] or [v] arrow keys to scroll through the directories.
- 3) Press the [RUN] key to select the directory.
- 4) The display will show the ID of the currently loaded audio cut on the first row
and the name of this cut on the second row.
- 5) Use the [^] and [v] arrow keys to scroll through the audio cuts.
- 6) Press the [RUN] or [ESC] key to leave the Select mode at any time.

NOTE: In this mode, the PBIB does not talk to the production switcher.

7. TRIGGER FUNCTIONS

GRASS VALLEY GROUP

<u>Trigger Value</u>	<u>Mode</u>
0	Play
1	Stop
2	None
3	Loop
4	Still ON
5	Still OFF
6	None
7 or greater	Play

SONY

<u>Trigger Value</u>	<u>Mode</u>
0	Stop
1	Play
2	None
3	Loop
4	Still ON
5	Still OFF
6	None
7 or greater	Play

Reference . . .

8. SETUP MENU

<u>MENU MODES</u>	<u>(Turning Wheel Clockwise)</u>									
RECORD	Press Softkey to select the desired record mode: Assemble, Insert, Lockout or Crash (Full).									
WIND MODE	Press Softkey to select: HOLD (fast wind is maintained only while key is depressed). OR LATCH (fast wind is initiated and maintained with momentary key press). Select fast wind speed (03.9X, etc.) by pressing Softkey.									
SLOMO	<table border="1" data-bbox="834 674 1409 789"> <tr> <td>SLOMO with:</td> <td>WHEEL</td> </tr> <tr> <td>SpdRange</td> <td>Preset</td> </tr> </table> <table border="1" data-bbox="834 814 1409 930"> <tr> <td>SLOMO with:</td> <td>TBAR</td> </tr> <tr> <td>Wheel SpdRange Preset</td> <td></td> </tr> </table> <p>Press Softkey [TBAR] (or [WHEEL]) to toggle between T-BAR and WHEEL.</p> <p>NOTE - The T-BAR has a fixed speed range of 0 → +200 with a detent at +100% play speed.</p> <p>For Wheel only: Press Softkey [SPDRANGE] to select SLOMO speed ranges: Press Softkey to select 0 → +200 OR -100 → +200. Press Softkey [BACK] to return to SLOMO MENU.</p> <p>Press [ESC] to exit SETUP MENU. OR turn the Wheel to select another item.</p> <p>For Wheel only: Press Softkey [PRSET] to select the SLOMO Preset Speed Mode.</p> <p>Press Softkey [UPDATE]. When exiting SLOMO mode, the last used speed is saved in the Preset Speed register. OR Press Softkey [STATIC]. The Preset Speed register is NOT updated when exiting SLOMO mode. It is only changed by [SHIFT] + [SLOMO] (PRESET SLOMO).</p>		SLOMO with:	WHEEL	SpdRange	Preset	SLOMO with:	TBAR	Wheel SpdRange Preset	
SLOMO with:	WHEEL									
SpdRange	Preset									
SLOMO with:	TBAR									
Wheel SpdRange Preset										

SWITCHER TYPE	<p>Select your switcher type.</p> <p>Grass Valley = Grass Valley Sony = Sony</p> <p>For Philips DD35 with PBus, use Grass Valley</p> <p>Press [ESC] to exit.</p> <p>IMPORTANT NOTE: Please set these items during initial installation.</p>
VERBOSE MODE	<p>Use VERBOSE MODE to display PBus communication errors.</p> <p>Note: Diagnostic tool only. For use when troubleshooting with DNF Controls Tech Support.</p> <p>Press [ESC] to exit.</p>
SELF TEST	<p>Press front panel keys. LCD will display the number of the key being pressed. An RS422 loop-back connector will indicate VTR# = OK when connected to PBIO or Device port.</p> <p>Press [ESC] to exit.</p>
PBIO TEST	<p>Press [RUN] run to activate. Line 2 of LCD will show incoming PBus data string.</p> <p>Press [ESC] to exit.</p>
SELECT PARITY	<p>Use arrows to scroll through the parity settings. Select the same parity that is used by your switcher.</p> <p>Press [ESC] to save and exit.</p>
CLEAR MEMORY	<p>Press [RUN] to clear memory. Press [RUN] to confirm or press [ESC] to exit without clearing memory.</p>

9. SPECIFICATIONS

SUPPLIED DIGICART ADAPTER WIRING DIAGRAM

PBIB DB9F
“PBIB”

DIGICART DB9M
“DIGICART”

Pin #	Description	Pin #	Description
1	Frame Ground	1	Ground
2	Receive A ←	5	Transmit A →
3	Transmit B →	8	Receive B ←
4	Not used		
5	Not used		
6	Not used		
7	Receive B ←	4	Transmit B →
8	Transmit A →	9	Receive A ←
9	Not used		

DEVICE RS422 SERIAL CONNECTOR

9-Pin D-Type, Female (DB9F)

Pin #	1	Frame Ground	Pin#	6	Receive Common
	2	Receive A ←		7	Receive B ←
	3	Transmit B →		8	Transmit A →
	4	Transmit Common		9	Frame Ground
	5	Spare			

PB IN RS422 SERIAL CONNECTOR

9-Pin D-Type, Female (DB9F)

Pin #	1	Frame Ground	Pin#	6	Common
	2	No Connection		7	No Connection
	3	Receive B ←		8	Receive A ←
	4	Common		9	Frame Ground
	5	Spare			

GPI IN/OUT CONNECTOR

15-Pin D-Type, Female (DB15F)

Pin #	1	GPI 1 Out	Pin#	9	GPI 1 In
	2	GPI 2 Out		10	GPI 2 In
	3	GPI 3 Out		11	GPI 3 In
	4	GPI 4 Out		12	GPI 4 In
	5	GPI 5 Out		13	GPI 5 In
	6	GPI 6 Out		14	GPI 6 In
	7	GPI 7 Out		15	GPI 7 In
	8	Ground			

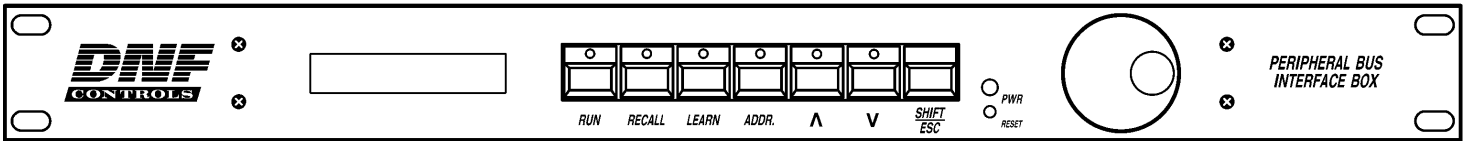
POWER SUPPLY CONNECTOR
9-Pin D-Type, Male (DB9M)

Pin#	1	+5Vdc	Pin#	6	+5Vdc
	2	+5Vdc		7	Ground
	3	Ground		8	Ground
	4	+12Vdc		9	Ground
	5	-12Vdc			

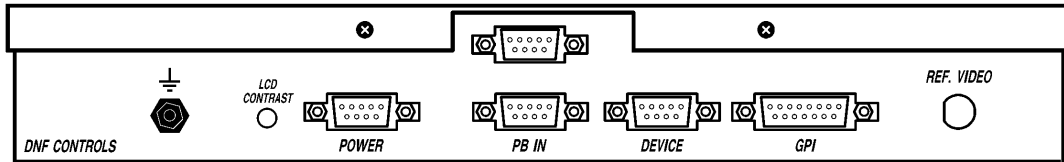
10. FRONT/REAR VIEWS

PERIPHERAL BUS INTERFACE BOX

FRONT VIEW



REAR VIEW



11. DNF CONTROLS LIMITED WARRANTY

DNF Controls warrants its product to be free from defects in material and workmanship for a period of one (1) year from the date of sale to the original purchaser from DNF Controls.

In order to enforce the rights under this warranty, the customer must first contact DNF's Customer Support Department to afford the opportunity of identifying and fixing the problem without sending the unit in for repair. If DNF's Customer Support Department cannot fix the problem, the customer will be issued a Returned Merchandise Authorization number (RMA). The customer will then ship the defective product prepaid to DNF Controls with the RMA number clearly indicated on the customer's shipping document. The merchandise is to be shipped to:

DNF Controls
12843 Foothill Blvd., Suite D
Sylmar, CA 91342
USA

Failure to obtain a proper RMA number prior to returning the product may result in the return not being accepted, or in a charge for the required repair.

DNF Controls, at its option, will repair or replace the defective unit. DNF Controls will return the unit prepaid to the customer. The method of shipment is at the discretion of DNF Controls, principally UPS Ground for shipments within the United States of America. Shipments to international customers will be sent via air. Should a customer require the product to be returned in a more expeditious manner, the return shipment will be billed to their freight account.

This warranty will be considered null and void if accident, misuse, abuse, improper line voltage, fire, water, lightning or other acts of God damaged the product. All repair parts are to be supplied by DNF Controls, either directly or through its authorized dealer network. Similarly, any repair work not performed by either DNF Controls or its authorized dealer may void the warranty.

After the warranty period has expired, DNF Controls offers repair services at prices listed in the DNF Controls Price List. DNF Controls reserves the right to refuse repair of any unit outside the warranty period that is deemed non-repairable.

DNF Controls shall not be liable for direct, indirect, incidental, consequential or other types of damage resulting from the use of the product.

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