DNF CONTROLS

MODEL NO. PBIB-SONYMD

PERIPHERAL BUS INTERFACE BOX

SONY MINI DISC INTERFACE

USER MANUAL

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1. REVISION HISTORY

011504 Rev. 2.1   Company header information revised.
                        Reformatted.
                        Added DNF Controls Limited Warranty.

080504 Rev. 2.2   Added Setup Menu.

2. DESCRIPTION

The Peripheral Bus Interface Box (PBIB) gives the production switcher control over the Sony Mini Disc, Digital Audio Recorder.

Upon receipt of the Learn command from the production switcher, the PBIB saves the TRACK 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.

Features:

❑   Use EMEM LEARN to learn the currently selected cut.

❑   Use EMEM RECALL to load the "learned" cut.

❑   Use TIMELINE triggers to: PLAY, STOP, LOOP, PAUSE.

❑   Front panel switches allow cut selection from the PBIB.

❑   Consists of the Peripheral Bus Interface Box (PBIB) and SonyMD software.

❑   Single rackmount unit controls one Sony MINI DISC.

3. INSTALLATION

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.

Connect the Sony Mini Disc "Serial Port2 Remote Control" connector to the "DEVICE" connector on the rear of the PBIB using a null modem cable.
See cable information below.

Connect the female, 9-pin plug on the power supply to the "POWER" connector on the rear of the PBIB.

Plug the power supply into 90 VAC – 240 VAC wall socket.

Installation is complete

4. SETUP

a. PARITY

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

1) Press [**SHIFT**] + [∧] or [**SHIFT**] + [∨].

2) Press [∧] or [∨] until "Select Parity" is displayed on the top line of the display.

3) Press [**RUN**].

4) Press [∧] 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 [∧] or [∨] Arrow keys to select the Device Address.
Press [**ESC**] when done.

c. PRODUCTION SWITCHER TYPE

1) Press [SHIFT] + [∧] or [SHIFT] + [∨].

2) Press the [∧] or [∨] 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 [∨] 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 MINI DISC

NOTE: The following instructions are for the Sony MiniDisk Model B 3 ONLY. Refer to your MD manual for details on other models.

1) Press the DISPLAY and STOP keys.

2) Press the Display key until Baud is selected. .

3) Configure the RS232 settings as follows:
Baud Rate = 9600
Length = 8 bits
Parity = Odd
Stop Bit = 1 bit

Refer to MD manual for details.

4) The top line of the PBIB display will show "MINI DISC: OK" if the PBIB can be successfully communicate with the MINI DISC.

The display will show "Mini Disc: Not OK" if there is a communications error. Check all connections and cables.

The top line of the PBIB display will show "Disc OUT" if there is no disc in the MD.

5. LEARN

❑ Select an Audio cut by the following procedure:

❑ Press [⋀] + [⋁] simultaneously**.**

❑ The first line of the display shows the currently loaded cut number and name.
The second line of the display shows: "Use Arrows, Run, ESC"

❑ Use the [⋀] or [⋁] Arrow keys to scroll through the cuts available on the disc.

❑ Press [**RUN**] or [**ESC**] to leave the Select mode.
The last displayed cut will be loaded on the MiniDisc.

a. 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 in to 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.

b.   LEARN ON THE PBIB

1)   Select the REGISTER number using the [⋀] or [⋁] Arrow keys.
     The bottom line of the display shows the contents of the register.

2)   On the MINI DISC: 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

1)   Select the Register number using the [⋀] or [⋁] keys.

2)   Press [**SHIFT**] + [**RECALL**] to recall the LEARNED audio cut.

3)   The display will show "RECALLED IT" for 1 second.

4)   The display will then show the ID of the currently loaded audio cut on the first
     line.

7.   TRIGGER FUNCTIONS

GRASS VALLEY GROUP

Trigger Value	Mode
0	Play
1	Cue Standby*
2	None
3	Loop
4	Still ON
5	Still OFF
6	None
7 or greater	Play

*Note: ONLY active in Play Mode. Recues the track to the point where the playback originally began and pauses.

SONY

Trigger Value	Mode
0	Cue Standby*
1	Play
2	None
3	Loop
4	Still ON
5	Still OFF
6	None
7 or greater	Play

*Note: ONLY active in Play Mode. Recues the track to the point where the playback originally began and pauses.

8.   SETUP MENU

MENU MODES	(Turning Wheel Clockwise)
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	ST300 display shows (Non T-Bar version): SLOMO with: WHEEL SpdRange Preset ST300 display shows (T-Bar version): SLOMO with: TBAR Wheel SpdRange Preset Press Softkey [**TBAR**] (or [**WHEEL**]) to toggle between T-BAR and WHEEL. **NOTE** - The T-BAR has a fixed speed range of 0 → +200 with a detent at +100% play speed. **For Wheel <u>only</u>:** 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. Press [**ESC**] to exit SETUP MENU. **OR** turn the Wheel to select another item. **For Wheel <u>only</u>:** Press Softkey [**PRSET**] to select the SLOMO Preset Speed Mode. 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).
SWITCHER TYPE	Select your switcher type. Grass Valley = Grass Valley Sony = Sony For Philips DD35 with PBus, use Grass Valley Press [**ESC**] to exit. **IMPORTANT NOTE:** Please set these items during initial installation.

VERBOSE MODE	Use VERBOSE MODE to display PBus communication errors. Note: Diagnostic tool only. For use when troubleshooting with DNF Controls Tech Support. Press [**ESC**] to exit.
SELF TEST	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**.** Press [**ESC**] to exit.
PBIO TEST	Press [**RUN**] run to activate. Line 2 of LCD will show incoming PBus data string. Press [**ESC**] to exit.
SELECT PARITY	Use arrows to scroll through the parity settings. Select the same parity that is used by your switcher. Press [**ESC**] to save and exit.
CLEAR MEMORY	Press [**RUN**] to clear memory. Press [**RUN**] to confirm or press [**ESC**] to exit without clearing memory.

9. SPECIFICATIONS

FRONT PANEL

1 Power LED

Switches	Run, Recall, Learn, Address, $\wedge$, $\vee$, Shift/ESC
Reset	Recessed push switch
Display	2-Line LCD, back lit with adjustable contrast
Size	19" x 5" x 1-3/4" (Rackmount) 7" x 5"x 1-1/2" (Table Top)
Weight	2 lbs.

REAR PANEL CONNECTORS

RS422 Serial Out (Device)	9-pin D-type connector, female (DB9-F)
Power	5 volt D.C., 500 ma. 90-265 VAC, 50/60 Hz converter supplied (rackmount or tabletop)
GPI	15-pin D-type connector, female (DB15F) Switch Input: SPST contact closure, momentary Status Output: Open collector, sink 50mA. (Custom program required for operation.)
PBI IN	RS422 from Switcher
PBI Loop	RS422 to other Peripheral Bus devices.

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

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

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			

PB LOOP 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			

PBIB-MINI DISC RS232 INTERFACE CABLE
DEVICE (DB9M)   **MINI DISC (DB9M)**

Pin	Description		Pin	Description
1	No Connection			
2	RD	←←←←←←←←	3	TX
3	TD	→→→→→→→→	2	RD
4	No Connection		4	DTR
5	Ground	------------------------	5	Ground
6	No Connection		6	DSR
7	RTS		7	RTS
8	No Connection		8	CTS
9	No Connection			

NOTES: The cable from the PBIB-MD (the "Device" connector on the PBIB to the Minidisk unit (MiniDisc) should have only three wires). As noted above, Pin 5 on both connectors is connected together. Pin 2 on the Device side connector is connected to Pin 3 on the MiniDisc side. Pin 3 on the Device side is connected to Pin 2 on the MiniDisc side. A "Null Modem" cable may be used if it conforms to these specifications.

You **<u>MUST</u>** add two jumpers on the DB9M at the Mini Disc end of the cable. Jumper Pin 7, RTS to Pin 8 CTS. Also jumper Pin 4, DTR to Pin 6 DSR.

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			

10. 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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