

08PIA-DK Digital Piano with ATSAM9708 and ATSAM3303

User Guide







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Section 1

Connecting the 08PIA-DK

1.1 Introduction The 08PIA-DK is a high quality stand-alone evaluation board based on the ATSAM9708 and the ATSAM3303 dedicated to digital piano and keyboard instruments.

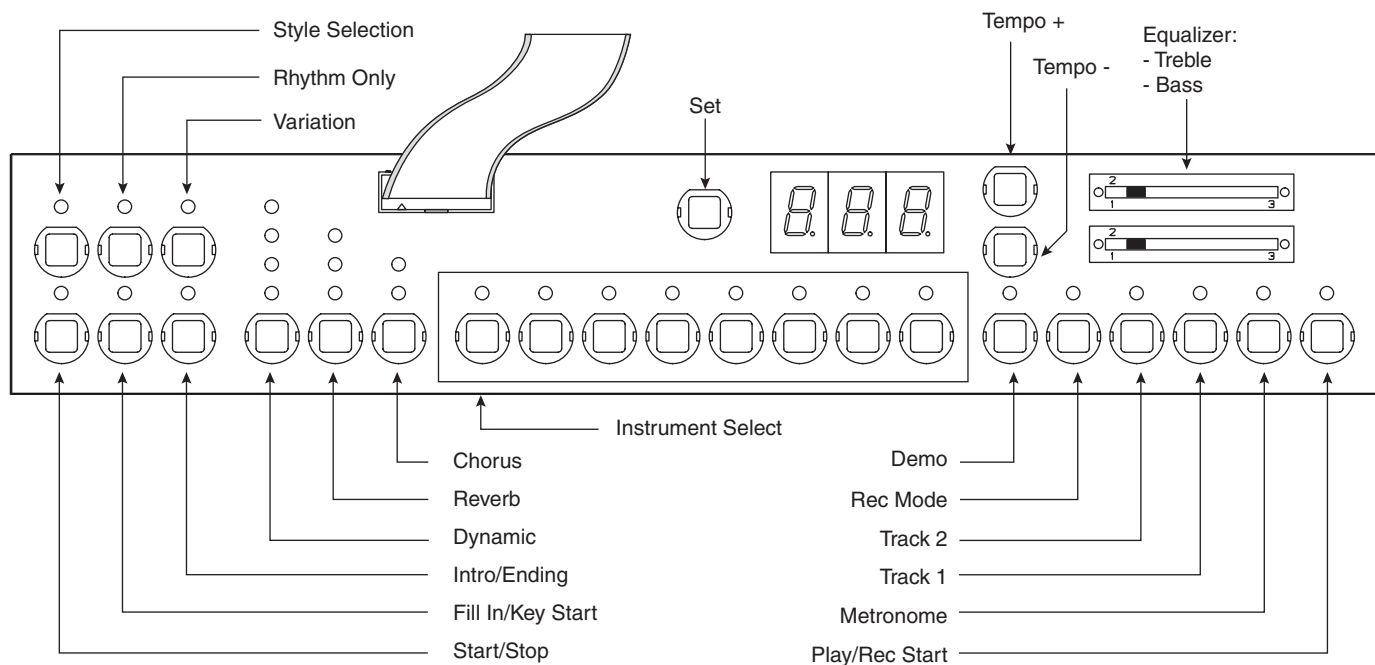
- 1.2 Connection Instructions**
- Connect the front panel to the main board.
 - Connect the main board to a FATAR TP10 (or TP23) keyboard.
 - Connect the main board to pedal (see Table 1-1 for pinout).
 - Connect the main board audio outputs to line level inputs of a mixer, a stereo sound system, etc.
 - Connect the main board to 12V/1A DC power supply (- to tip, + to ring).

Table 1-1. Pedal Inputs (J15) Pinout

Pin No.	Function	Description
1	Pedal Ground	Reference Ground for pedal inputs
2	Forte (Sustain)	6 level Half-pedal <ul style="list-style-type: none">• Sustain Max if connected to Pedal Ground• Sustain Off if not connected
3	Sostenuto	On/Off pedal <ul style="list-style-type: none">• Sostenuto on if connected to Pedal Ground• Sostenuto off if not connected
4	Una Corda (Soft)	On/Off pedal <ul style="list-style-type: none">• Soft on if connected to Pedal Ground• Soft off if not connected

1.3 Front Panel

Figure 1-1. 08PIA-DK Front Panel



1.4 Implementation

1.4.1 Instrument Select

Table 1-2. Instrument Select

Setting	Instrument
1	Studio Grand Piano
2	Concert Grand Piano
3	Electric Piano 1
4	Electric Piano 2
5	Harpsichord
6	Vibes
7	Strings
8	Church Organ

Layer (dual) mode is available by simultaneously pressing two “Instrument Select” buttons.



- 1.4.2 Reverb Type** Possible settings are:
- Room1
 - Room2
 - Hall
- Reverb depth can be set for each instrument. Follow the steps below:
1. Hold the “Reverb” button pressed down.
 2. Use the “Tempo +/-” buttons to adjust the reverb depth in the range from 0 to 20
- 1.4.3 Chorus** Possible settings are:
- Off
 - Chorus1
 - Chorus2
- Chorus depth can be set for each instrument. Follow the steps below:
1. Hold the “Chorus” button pressed down.
 2. Use the “Tempo +/-” buttons to adjust the chorus depth in the range from 0 to 20.
- 1.4.4 Dynamic Curve** Possible settings are:
- Normal
 - Hard
 - Soft
 - Fixed Velocity (default = 64)
- The value for the fixed velocity can be set:
1. Press the “Dynamic” button repeatedly until all the “Dynamic” LEDs are off.
 2. Hold the “Dynamic” button pressed down.
 3. Use the “Tempo +/-” buttons to adjust the fixed dynamic in the range from 0 to 127.
- 1.4.5 Sympathetic Resonance** Press the “Set” button repeatedly.
- 0 = No resonance
 - 1 = Low resonance depth
 - 2 = Medium resonance depth
 - 3 = High resonance depth
- 1.4.6 Demo** Press “Demo”, then press the “Instrument Select” button 1, 2 or 3.

1.4.7 Metronome

Possible settings are:

- On
- Off

The metronome signature can be set. Follow the steps below:

1. Hold the "Metronome" button" pressed down.
2. Use the "Tempo +/-" buttons to choose the signature.

Available signatures are 1/4, 2/4, 3/4, 4/4, 6/4, 6/8, 12/8.

1.4.8 Sequencer

Use "Rec Mode", "Play/Rec Start", "Track 1" and "Track 2" buttons.

Below is an example of how to use the sequencer:

■ Record track 1:

1. Press the "Rec Mode" button. The "Rec Mode" LED is lit.
2. Press the "Track 1" button. "Play/Rec Start" and "Track 1" LEDs are flashing.
3. Start recording by playing the keyboard or by pressing the "Play/Rec Start" button. "Play/Rec Start" LED stops flashing and stays lit.
4. Stop recording by pressing the "Rec Mode" button. "Rec Mode" LED is off.

■ Play track 1:

1. If "Track 1" LED is not lit, press the "Track 1" button. The "Track 1" LED is lit.
2. Press the "Play/Rec Start" button to play what is recorded on Track 1. The "Play/Rec Start" LED is lit.

■ Record track 2:

1. Press the "Rec Mode" button. "Rec Mode" and "Track 1" LEDs are lit.
2. Press the "Track 2" button. "Play/Rec Start" and "Track 2" LEDs are flashing.
3. Start recording by playing the keyboard or by pressing the "Play/Rec Start" button. "Play/Rec Start" LED stops flashing and stays lit.
4. Stop recording by pressing the "Rec Mode" button. "Rec Mode" LED is off.

■ Play track 1 and track 2:

1. If "Track 1" LED is not lit, press the "Track 1" button. The "Track 1" LED lights up.
2. If "Track 2" LED is not lit, press the "Track 2" button. The "Track 2" LED lights up.
3. Press the "Play/Rec Start" button to play what is recorded on Track 1 and Track 2. The "Play/Rec Start" LED is lit.

1.5 Optional Functions

1.5.1 Style Player Use “Intro/Ending”, “Fill-In”, “Start/Stop”, “Variation”, “Rhythm Only” and “Style Selection” buttons.

1.5.2 Style Selection Hold the “Style Selection” button and select with “Tempo+/-” buttons.

Table 1-3. Style Selection Settings

Setting	Style
0	EuroPop
1	90s Dance
2	KickDance
3	80s Pop
4	TechnoRock
5	Country
6	Beguine
7	Bossa
8	Blues
9	JazzTet
10	Rock&Roll
11	Soca
12	Lounge
13	Waltzer





Section 2

Revision History

2.1 Document Details

2.1.1 Title 08PIA-DK User Guide

2.1.2 Literature Number 6163

2.2 Revision History

2.2.1 Version A First issue.





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