23/11/98 11:43:23 **Access PIN: 12310** **File Name: 033 EAW A1 850A EQIN.8KP**

Comment:
[EAW 8J] A1 Audio Inc. V(1.3) Fr. MX800i Hi Frequency (IN) Subwoofer Mode (Adjacent);Updated P.List

'>' indicates that the parameter is editable

Main Menu

> Master Delay Input A:	20µs
> Master Delay Input B:	20µs

Output:	1	2	3	4	5
> Source:	From A	From A	From A	From A	From A
> Delay:	1333µs	20µs	41µs	62µs	20µs
> Phase Polarity:	Normal	Normal	Normal	Normal	Normal
> Phase Adjust:	0°	0°	0°	0°	0°
> Level:	6dB	6dB	4dB	-2dB	0dB
> Label:	Sub	Lo	Mid	Hi	Full Range

EQ Menu

Output:	1	2	3	4	5
> HPF Frequency:	25Hz	69.4Hz	250Hz	1550Hz	20Hz
> HPF Response (dB/Oct.):	L-R/24	L-R/24	L-R/24	L-R/24	Full Range
> HPF Peak:	0dB	0dB	0dB	0dB	0dB
> LPF Frequency:	85.2Hz	254Hz	1550Hz	50Hz	20000Hz
> LPF Response (dB/Oct.):	L-R/24	L-R/24	L-R/24	Full Range	Full Range
> PEQ1 Frequency:	31.5Hz	20Hz	630Hz	6720Hz	20Hz
> PEQ1 Q:	0.9 Oct.	1 Oct.	1.5 Oct.	2 Oct.	1 Oct.
> PEQ1 Level:	8dB	0dB	0-.5dB	-3dB	0dB
> PEQ2 Frequency:	20Hz	20Hz	20Hz	18200Hz	20Hz
> PEQ2 Q:	1 Oct.	1 Oct.	1 Oct.	2.5 Oct.	1 Oct.
> PEQ2 Level:	0dB	0dB	0dB	11dB	0dB
> LEQ Q/Slope:	12dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct
> LEQ Frequency:	20Hz	20Hz	20Hz	20Hz	20Hz
> LEQ Level:	3.5dB	0dB	0dB	0dB	0dB
> HEQ Q/Slope	6dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct
> HEQ Frequency:	500Hz	500Hz	500Hz	500Hz	500Hz
> HEQ Level:	0dB	0dB	0dB	0dB	0dB

Dynamics Menu

Output:	1	2	3	4	5
> Compressor Threshold:	22dB	22dB	22dB	22dB	22dB
> Compressor Ratio:	1:1	1:1	1:1	1:1	1:1
> Compressor Attack:	MIN	MIN	MIN	MIN	MIN
> Compressor Release:	10ms	10ms	10ms	10ms	10ms
> Gate Threshold:	-80dBu	-80dBu	-80dBu	-80dBu	-80dBu
> Gate Range:	OFF	OFF	OFF	OFF	OFF
> Gate Decay:	0.01dB/ms	0.01dB/ms	0.01dB/ms	0.01dB/ms	0.01dB/ms
> Limiter Threshold:	15dBu	15dBu	13dBu	13dBu	22dBu

Klark Teknik DN6000 Preset Name: EAW A1 850A NOEQ

23/11/98 11:43:33 **Access PIN: 12311** **File Name: 034 EAW A1 850A NOEQ.8KP**

Comment:
[EAW 8J] A1 Audio Inc. V(1.2) Fr. MX800i Hi Frequency (OUT) Subwoofer Mode (Adjacent)

'>' indicates that the parameter is editable

Main Menu

> Master Delay Input A:	20µs
> Master Delay Input B:	20µs

Output:	1	2	3	4	5
> Source:	From A	From A	From A	From A	From A
> Delay:	1333µs	20µs	41µs	62µs	20µs
> Phase Polarity:	Normal	Normal	Normal	Normal	Normal
> Phase Adjust:	0°	0°	0°	0°	0°
> Level:	6dB	6dB	4dB	-2dB	0dB
> Label:	Sub	Lo	Mid	Hi	Full Range

EQ Menu

Output:	1	2	3	4	5
> HPF Frequency:	25Hz	69.4Hz	250Hz	1550Hz	20Hz
> HPF Response (dB/Oct.):	L-R/24	L-R/24	L-R/24	L-R/24	Full Range
> HPF Peak:	0dB	0dB	0dB	0dB	0dB
> LPF Frequency:	85.2Hz	254Hz	1550Hz	50Hz	20000Hz
> LPF Response (dB/Oct.):	L-R/24	L-R/24	L-R/24	Full Range	Full Range
> PEQ1 Frequency:	31.5Hz	20Hz	630Hz	6720Hz	20Hz
> PEQ1 Q:	0.9 Oct.	1 Oct.	1.5 Oct.	2 Oct.	1 Oct.
> PEQ1 Level:	8dB	0dB	0-.5dB	-3dB	0dB
> PEQ2 Frequency:	20Hz	20Hz	20Hz	18200Hz	20Hz
> PEQ2 Q:	1 Oct.	1 Oct.	1 Oct.	2.5 Oct.	1 Oct.
> PEQ2 Level:	0dB	0dB	0dB	0dB	0dB
> LEQ Q/Slope:	12dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct
> LEQ Frequency:	20Hz	20Hz	20Hz	20Hz	20Hz
> LEQ Level:	3.5dB	0dB	0dB	0dB	0dB
> HEQ Q/Slope	6dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct
> HEQ Frequency:	500Hz	500Hz	500Hz	500Hz	500Hz
> HEQ Level:	0dB	0dB	0dB	0dB	0dB

Dynamics Menu

Output:	1	2	3	4	5
> Compressor Threshold:	22dB	22dB	22dB	22dB	22dB
> Compressor Ratio:	1:1	1:1	1:1	1:1	1:1
> Compressor Attack:	MIN	MIN	MIN	MIN	MIN
> Compressor Release:	10ms	10ms	10ms	10ms	10ms
> Gate Threshold:	-80dBu	-80dBu	-80dBu	-80dBu	-80dBu
> Gate Range:	OFF	OFF	OFF	OFF	OFF
> Gate Decay:	0.01dB/ms	0.01dB/ms	0.01dB/ms	0.01dB/ms	0.01dB/ms
> Limiter Threshold:	15dBu	15dBu	13dBu	13dBu	22dBu

Klark Teknik DN8000 Preset Name: EAW A1 850D EQIN

23/11/98 11:43:46 **Access PIN: 12312** **File Name: 035 EAW A1 850D EQIN.8KP**

Comment:
[EAW 8J] A1 Audio Inc. V(1.2) Fr. MX800i Hi Frequency (IN) Subwoofer Mode (Distant);Updated P.List

'>' indicates that the parameter is editable

Main Menu

> Master Delay Input A:	20µs
> Master Delay Input B:	20µs

Output:	1	2	3	4	5
> Source:	From A	From A	From A	From A	From A
> Delay:	1333µs	20µs	41µs	62µs	20µs
> Phase Polarity:	Normal	Normal	Normal	Normal	Normal
> Phase Adjust:	0°	0°	0°	0°	0°
> Level:	6dB	6dB	4dB	-2dB	0dB
> Label:	Sub	Lo	Mid	Hi	Full Range

EQ Menu

Output:	1	2	3	4	5
> HPF Frequency:	25Hz	32.6Hz	250Hz	1550Hz	20Hz
> HPF Response (dB/Oct.):	L-R/24	L-R/24	L-R/24	L-R/24	Full Range
> HPF Peak:	0dB	0dB	0dB	0dB	0dB
> LPF Frequency:	85.2Hz	254Hz	1550Hz	50Hz	20000Hz
> LPF Response (dB/Oct.):	L-R/24	L-R/24	L-R/24	Full Range	Full Range
> PEQ1 Frequency:	31.5Hz	32.6Hz	630Hz	6720Hz	20Hz
> PEQ1 Q:	0.9 Oct.	0.7 Oct.	1.5 Oct.	2 Oct.	1 Oct.
> PEQ1 Level:	8dB	5dB	0-.5dB	-3dB	0dB
> PEQ2 Frequency:	20Hz	200Hz	20Hz	18200Hz	20Hz
> PEQ2 Q:	1 Oct.	0.8 Oct.	1 Oct.	2.5 Oct.	1 Oct.
> PEQ2 Level:	0dB	0.5dB	0dB	11dB	0dB
> LEQ Q/Slope:	12dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct
> LEQ Frequency:	20Hz	20Hz	20Hz	20Hz	20Hz
> LEQ Level:	3.5dB	0dB	0dB	0dB	0dB
> HEQ Q/Slope	6dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct
> HEQ Frequency:	500Hz	500Hz	500Hz	500Hz	500Hz
> HEQ Level:	0dB	0dB	0dB	0dB	0dB

Dynamics Menu

Output:	1	2	3	4	5
> Compressor Threshold:	22dB	22dB	22dB	22dB	22dB
> Compressor Ratio:	1:1	1:1	1:1	1:1	1:1
> Compressor Attack:	MIN	MIN	MIN	MIN	MIN
> Compressor Release:	10ms	10ms	10ms	10ms	10ms
> Gate Threshold:	-80dBu	-80dBu	-80dBu	-80dBu	-80dBu
> Gate Range:	OFF	OFF	OFF	OFF	OFF
> Gate Decay:	0.01dB/ms	0.01dB/ms	0.01dB/ms	0.01dB/ms	0.01dB/ms
> Limiter Threshold:	15dBu	15dBu	13dBu	13dBu	22dBu

Klark Teknik DN8000 Preset Name: EAW A1 850D NOEQ

23/11/98 11:43:59 **Access PIN: 12313** **File Name: 036 EAW A1 850D NOEQ.8KP**

Comment:
[EAW 8J] A1 Audio Inc. V(1.2) Fr. MX800i Hi Frequency (OUT) Subwoofer Mode (Distant);Updated P.List

'>' indicates that the parameter is editable

Main Menu

> Master Delay Input A:	20µs
> Master Delay Input B:	20µs

Output:	1	2	3	4	5
> Source:	From A	From A	From A	From A	From A
> Delay:	1333µs	20µs	41µs	62µs	20µs
> Phase Polarity:	Normal	Normal	Normal	Normal	Normal
> Phase Adjust:	0°	0°	0°	0°	0°
> Level:	6dB	6dB	4dB	-2dB	0dB
> Label:	Sub	Lo	Mid	Hi	Full Range

EQ Menu

Output:	1	2	3	4	5
> HPF Frequency:	25Hz	32.6Hz	250Hz	1550Hz	20Hz
> HPF Response (dB/Oct.):	L-R/24	L-R/24	L-R/24	L-R/24	Full Range
> HPF Peak:	0dB	0dB	0dB	0dB	0dB
> LPF Frequency:	85.2Hz	254Hz	1550Hz	50Hz	20000Hz
> LPF Response (dB/Oct.):	L-R/24	L-R/24	L-R/24	Full Range	Full Range
> PEQ1 Frequency:	31.5Hz	32.6Hz	630Hz	6720Hz	20Hz
> PEQ1 Q:	0.9 Oct.	0.7 Oct.	1.5 Oct.	2 Oct.	1 Oct.
> PEQ1 Level:	8dB	5dB	0-.5dB	-3dB	0dB
> PEQ2 Frequency:	20Hz	200Hz	20Hz	18200Hz	20Hz
> PEQ2 Q:	1 Oct.	0.8 Oct.	1 Oct.	2.5 Oct.	1 Oct.
> PEQ2 Level:	0dB	0.5dB	0dB	0dB	0dB
> LEQ Q/Slope:	12dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct
> LEQ Frequency:	20Hz	20Hz	20Hz	20Hz	20Hz
> LEQ Level:	3.5dB	0dB	0dB	0dB	0dB
> HEQ Q/Slope	6dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct
> HEQ Frequency:	500Hz	500Hz	500Hz	500Hz	500Hz
> HEQ Level:	0dB	0dB	0dB	0dB	0dB

Dynamics Menu

Output:	1	2	3	4	5
> Compressor Threshold:	22dB	22dB	22dB	22dB	22dB
> Compressor Ratio:	1:1	1:1	1:1	1:1	1:1
> Compressor Attack:	MIN	MIN	MIN	MIN	MIN
> Compressor Release:	10ms	10ms	10ms	10ms	10ms
> Gate Threshold:	-80dBu	-80dBu	-80dBu	-80dBu	-80dBu
> Gate Range:	OFF	OFF	OFF	OFF	OFF
> Gate Decay:	0.01dB/ms	0.01dB/ms	0.01dB/ms	0.01dB/ms	0.01dB/ms
> Limiter Threshold:	15dBu	15dBu	13dBu	13dBu	22dBu

23/11/98 11:44:20 **Access PIN: 12314** **File Name: 037 EAW A1 300A EQIN.8KP**

Comment:
[EAW 300i] A1 Audio Inc. V(1.2) Fr. MX300i HiFrequency (IN) Subwoofer Mode (Adjacent);Updated P.List

'>' indicates that the parameter is editable

Main Menu

> Master Delay Input A:	20µs
> Master Delay Input B:	20µs

Output:	1	2	3	4	5
> Source:	From A+B	From A	From A	From B	From B
> Delay:	20µs	41µs	20µs	41µs	20µs
> Phase Polarity:	Normal	Normal	Normal	Normal	Normal
> Phase Adjust:	0°	0°	0°	0°	0°
> Level:	11dB	8dB	2dB	8dB	2dB
> Label:	Sub	Lo	Hi	Lo	Hi

EQ Menu

Output:	1	2	3	4	5
> HPF Frequency:	20Hz	67.2Hz	426Hz	67.2Hz	426Hz
> HPF Response (dB/Oct.):	L-R/24	L-R/24	L-R/24	L-R/24	L-R/24
> HPF Peak:	0dB	0dB	0dB	0dB	0dB
> LPF Frequency:	87.9Hz	413Hz	20000Hz	413Hz	20000Hz
> LPF Response (dB/Oct.):	L-R/24	L-R/24	Full Range	L-R/24	Full Range
> PEQ1 Frequency:	30.5Hz	20Hz	6500Hz	20Hz	6500Hz
> PEQ1 Q:	0.5 Oct.	1 Oct.	3 Oct.	1 Oct.	3 Oct.
> PEQ1 Level:	5dB	0dB	0.5dB	0dB	0.5dB
> PEQ2 Frequency:	48.4Hz	20Hz	18200Hz	20Hz	18200Hz
> PEQ2 Q:	1.5 Oct.	1 Oct.	2.5 Oct.	1 Oct.	2.5 Oct.
> PEQ2 Level:	6dB	0dB	5dB	0dB	5dB
> LEQ Q/Slope:	6dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct
> LEQ Frequency:	20Hz	20Hz	20Hz	20Hz	20Hz
> LEQ Level:	0dB	0dB	0dB	0dB	0dB
> HEQ Q/Slope	6dB/Oct	6dB/Oct	12dB/Oct	6dB/Oct	12dB/Oct
> HEQ Frequency:	500Hz	500Hz	15000Hz	500Hz	15000Hz
> HEQ Level:	0dB	0dB	0.5dB	0dB	0.5dB

Dynamics Menu

Output:	1	2	3	4	5
> Compressor Threshold:	22dB	22dB	22dB	22dB	22dB
> Compressor Ratio:	1:1	1:1	1:1	1:1	1:1
> Compressor Attack:	MIN	MIN	MIN	MIN	MIN
> Compressor Release:	10ms	10ms	10ms	10ms	10ms
> Gate Threshold:	-80dBu	-80dBu	-80dBu	-80dBu	-80dBu
> Gate Range:	OFF	OFF	OFF	OFF	OFF
> Gate Decay:	0.01dB/ms	0.01dB/ms	0.01dB/ms	0.01dB/ms	0.01dB/ms
> Limiter Threshold:	10dBu	11dBu	15dBu	11dBu	15dBu

Klark Teknik DN8000 Preset Name: EAW A1 300A NOEQ

23/11/98 11:44:41 **Access PIN: 12315** **File Name: 038 EAW A1 300A NOEQ.8KP**

Comment:
[EAW 300i] A1 Audio Inc. V(1.2) Fr.MX300i HiFrequency (OUT) Subwoofer Mode (Adjacent);Updated P.List

'>' indicates that the parameter is editable

Main Menu

> Master Delay Input A:	20µs
> Master Delay Input B:	20µs

Output:	1	2	3	4	5
> Source:	From A+B	From A	From A	From B	From B
> Delay:	20µs	41µs	20µs	41µs	20µs
> Phase Polarity:	Normal	Normal	Normal	Normal	Normal
> Phase Adjust:	0°	0°	0°	0°	0°
> Level:	11dB	8dB	2dB	8dB	2dB
> Label:	Sub	Lo	Hi	Lo	Hi

EQ Menu

Output:	1	2	3	4	5
> HPF Frequency:	20Hz	67.2Hz	426Hz	67.2Hz	426Hz
> HPF Response (dB/Oct.):	L-R/24	L-R/24	L-R/24	L-R/24	L-R/24
> HPF Peak:	0dB	0dB	0dB	0dB	0dB
> LPF Frequency:	87.9Hz	413Hz	20000Hz	413Hz	20000Hz
> LPF Response (dB/Oct.):	L-R/24	L-R/24	Full Range	L-R/24	Full Range
> PEQ1 Frequency:	30.5Hz	20Hz	6500Hz	20Hz	6500Hz
> PEQ1 Q:	0.5 Oct.	1 Oct.	3 Oct.	1 Oct.	3 Oct.
> PEQ1 Level:	5dB	0dB	0.5dB	0dB	0.5dB
> PEQ2 Frequency:	48.4Hz	20Hz	18200Hz	20Hz	18200Hz
> PEQ2 Q:	1.5 Oct.	1 Oct.	2.5 Oct.	1 Oct.	2.5 Oct.
> PEQ2 Level:	6dB	0dB	0dB	0dB	0dB
> LEQ Q/Slope:	6dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct
> LEQ Frequency:	20Hz	20Hz	20Hz	20Hz	20Hz
> LEQ Level:	0dB	0dB	0dB	0dB	0dB
> HEQ Q/Slope	6dB/Oct	6dB/Oct	12dB/Oct	6dB/Oct	12dB/Oct
> HEQ Frequency:	500Hz	500Hz	15000Hz	500Hz	15000Hz
> HEQ Level:	0dB	0dB	0.5dB	0dB	0.5dB

Dynamics Menu

Output:	1	2	3	4	5
> Compressor Threshold:	22dB	22dB	22dB	22dB	22dB
> Compressor Ratio:	1:1	1:1	1:1	1:1	1:1
> Compressor Attack:	MIN	MIN	MIN	MIN	MIN
> Compressor Release:	10ms	10ms	10ms	10ms	10ms
> Gate Threshold:	-80dBu	-80dBu	-80dBu	-80dBu	-80dBu
> Gate Range:	OFF	OFF	OFF	OFF	OFF
> Gate Decay:	0.01dB/ms	0.01dB/ms	0.01dB/ms	0.01dB/ms	0.01dB/ms
> Limiter Threshold:	10dBu	11dBu	15dBu	11dBu	15dBu

Klark Teknik DN8000 Preset Name: EAW A1 300D EQIN

23/11/98 11:44:53 **Access PIN: 12320** **File Name: 039 EAW A1 300D EQIN.8KP**

Comment:
[EAW 300i] A1 Audio Inc. V(1.2) Fr. MX300i Hi Frequency (IN) Subwoofer Mode (Distant);Updated P.List

'>' indicates that the parameter is editable

Main Menu

> Master Delay Input A:	20µs
> Master Delay Input B:	20µs

Output:	1	2	3	4	5
> Source:	From A+B	From A	From A	From B	From B
> Delay:	20µs	41µs	20µs	41µs	20µs
> Phase Polarity:	Normal	Normal	Normal	Normal	Normal
> Phase Adjust:	0°	0°	0°	0°	0°
> Level:	11dB	8dB	2dB	8dB	2dB
> Label:	Sub	Lo	Hi	Lo	Hi

EQ Menu

Output:	1	2	3	4	5
> HPF Frequency:	20Hz	34.9Hz	426Hz	34.9Hz	426Hz
> HPF Response (dB/Oct.):	L-R/24	L-R/24	L-R/24	L-R/24	L-R/24
> HPF Peak:	0dB	0dB	0dB	0dB	0dB
> LPF Frequency:	87.9Hz	413Hz	20000Hz	413Hz	20000Hz
> LPF Response (dB/Oct.):	L-R/24	L-R/24	Full Range	L-R/24	Full Range
> PEQ1 Frequency:	30.5Hz	34.9Hz	6500Hz	34.9Hz	6500Hz
> PEQ1 Q:	0.5 Oct.	0.7 Oct.	3 Oct.	0.7 Oct.	3 Oct.
> PEQ1 Level:	5dB	6dB	0.5dB	6dB	0.5dB
> PEQ2 Frequency:	48.4Hz	20Hz	18200Hz	20Hz	18200Hz
> PEQ2 Q:	1.5 Oct.	1 Oct.	2.5 Oct.	1 Oct.	2.5 Oct.
> PEQ2 Level:	6dB	0dB	5dB	0dB	5dB
> LEQ Q/Slope:	6dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct
> LEQ Frequency:	20Hz	20Hz	20Hz	20Hz	20Hz
> LEQ Level:	0dB	0dB	0dB	0dB	0dB
> HEQ Q/Slope	6dB/Oct	6dB/Oct	12dB/Oct	6dB/Oct	12dB/Oct
> HEQ Frequency:	500Hz	500Hz	15000Hz	500Hz	15000Hz
> HEQ Level:	0dB	0dB	0.5dB	0dB	0.5dB

Dynamics Menu

Output:	1	2	3	4	5
> Compressor Threshold:	22dB	22dB	22dB	22dB	22dB
> Compressor Ratio:	1:1	1:1	1:1	1:1	1:1
> Compressor Attack:	MIN	MIN	MIN	MIN	MIN
> Compressor Release:	10ms	10ms	10ms	10ms	10ms
> Gate Threshold:	-80dBu	-80dBu	-80dBu	-80dBu	-80dBu
> Gate Range:	OFF	OFF	OFF	OFF	OFF
> Gate Decay:	0.01dB/ms	0.01dB/ms	0.01dB/ms	0.01dB/ms	0.01dB/ms
> Limiter Threshold:	10dBu	11dBu	15dBu	11dBu	15dBu

Klark Teknik DN6000 Preset Name: EAW A1 300D NOEQ

23/11/98 11:45:14 **Access PIN: 12321** **File Name: 040 EAW A1 300D NOEQ.8KP**

Comment:
[EAW 300i] A1 Audio Inc. V(1.2) Fr. MX300i HiFrequency (OUT) Subwoofer Mode (Distant);Updated P.List

'>' indicates that the parameter is editable

Main Menu

> Master Delay Input A:	20µs
> Master Delay Input B:	20µs

Output:	1	2	3	4	5
> Source:	From A+B	From A	From A	From B	From B
> Delay:	20µs	41µs	20µs	41µs	20µs
> Phase Polarity:	Normal	Normal	Normal	Normal	Normal
> Phase Adjust:	0°	0°	0°	0°	0°
> Level:	11dB	8dB	2dB	8dB	2dB
> Label:	Sub	Lo	Hi	Lo	Hi

EQ Menu

Output:	1	2	3	4	5
> HPF Frequency:	20Hz	34.9Hz	426Hz	34.9Hz	426Hz
> HPF Response (dB/Oct.):	L-R/24	L-R/24	L-R/24	L-R/24	L-R/24
> HPF Peak:	0dB	0dB	0dB	0dB	0dB
> LPF Frequency:	87.9Hz	413Hz	20000Hz	413Hz	20000Hz
> LPF Response (dB/Oct.):	L-R/24	L-R/24	Full Range	L-R/24	Full Range
> PEQ1 Frequency:	30.5Hz	34.9Hz	6500Hz	34.9Hz	6500Hz
> PEQ1 Q:	0.5 Oct.	0.7 Oct.	3 Oct.	0.7 Oct.	3 Oct.
> PEQ1 Level:	5dB	6dB	0.5dB	6dB	0.5dB
> PEQ2 Frequency:	48.4Hz	20Hz	18200Hz	20Hz	18200Hz
> PEQ2 Q:	1.5 Oct.	1 Oct.	2.5 Oct.	1 Oct.	2.5 Oct.
> PEQ2 Level:	6dB	0dB	0dB	0dB	0dB
> LEQ Q/Slope:	6dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct	6dB/Oct
> LEQ Frequency:	20Hz	20Hz	20Hz	20Hz	20Hz
> LEQ Level:	0dB	0dB	0dB	0dB	0dB
> HEQ Q/Slope	6dB/Oct	6dB/Oct	12dB/Oct	6dB/Oct	12dB/Oct
> HEQ Frequency:	500Hz	500Hz	15000Hz	500Hz	15000Hz
> HEQ Level:	0dB	0dB	0.5dB	0dB	0.5dB

Dynamics Menu

Output:	1	2	3	4	5
> Compressor Threshold:	22dB	22dB	22dB	22dB	22dB
> Compressor Ratio:	1:1	1:1	1:1	1:1	1:1
> Compressor Attack:	MIN	MIN	MIN	MIN	MIN
> Compressor Release:	10ms	10ms	10ms	10ms	10ms
> Gate Threshold:	-80dBu	-80dBu	-80dBu	-80dBu	-80dBu
> Gate Range:	OFF	OFF	OFF	OFF	OFF
> Gate Decay:	0.01dB/ms	0.01dB/ms	0.01dB/ms	0.01dB/ms	0.01dB/ms
> Limiter Threshold:	10dBu	11dBu	15dBu	11dBu	15dBu

KLARK TEKNIK

DN8000 Software Version 1.15 OEM Preset Access PINs

4 February, 1998

Preset Name	Preset Access PIN
2&2-WAY,MOMO FR	00001
2&2-WAY, MONO SUB	00001
3-WAY & 2-WAY	00001
4-WAY,MONO FR	00001
4-WAY,MONO SUB	00001
4-WAY,DI ON IN.A	00001
5-WAY,MONO SUB	00001
FULL 5-WAY,LO-HI	00001
5-WAY DISTRIBUTE	00001
TEST REFERENCE	21534
EV 4183XA & SUB	30431
EV 41221XB & SUB	13554
EV4181/4122/4183	35505
EV 4181 & 4122	04344
EV 4181 & 4183	04511
EV DMS1122/85&SB	02213
EV DMS1152/64&SB	43513
EV DMS CONFIGURE	30323
EV DMS2181T&2122	00244
EV 2181T&1183/64	43042
EV MTL4B,4.5/64B	44413
EV MTL4B,4.5/42B	22223
EV MTL4B,4.5/64*	52431
EV MTL4B,4.5/42*	52133
EV MTL2B/2.5/94B	51540
EV MTL2B,2.5/64B	13440
EV MTL2B,2.5/42B	13132
EV MTL2B,2.5/22B	21521
EV X-ARRAY A	01145
EV X-ARRAY B	01150
EAW MX800-62EBH1	13313
EAW STANDARD 8J	15132
EAW A1 850A EQIN	12310
EAW A1 850A NOEQ	12311
EAW A1 850D EQIN	12312
EAW A1 850D NOEQ	12313
EAW A1 300A EQIN	12314
EAW A1 300A NOEQ	12315
EAW A1 300D EQIN	12320
EAW A1 300D NOEQ	12321

DN8000 - User Interface and Software

The User Interface - What's On The Front Panel.

The DN8000 user interface can be split into four main areas with regards the hardware/software modules. These are

- ⋆ **The three sets of switches: black keys, mutes, pot switches;**
- ⋆ **The LCD and associated hardware;**
- ⋆ **The LEDs: input meters, output meters, labels, mutes;**
- ⋆ **The analogue pots: dual input pot, output pots and**
- ⋆ **The encoder.**

OK, so that's five main areas then. Each of these can be thought of as a module containing both hardware and software, with one complementing the other. The specific details of the software required to control each hardware module are not within the scope of this document. If details are required, I'll be only to happy to supply the information, bearing in mind the fact that questions about the software are only for the terminally bored.

How the different modules are controlled.

Each module has control algorithms that are specific to what it has to perform. Each module will be dealt with in turn, describing the hardware interaction with the software. The associated test function, if there is one, will be described in a later section.

The Switches.

The switches are read only type controls, and give no feedback themselves as to what function they have performed/are performing, so the hardware for them consists of a latch[1] which is periodically read by the processor to determine their current state. All three sets of switches are handled in the same way, except for the black keys. They work slightly differently. Well, the principle is the same at any rate. The microprocessor has a built in section known as the 'periodic interrupt timer'. This does as the name might suggest and, at regular intervals, stops the processor doing what it's currently doing and tells it to do something else for a moment, before allowing it to continue.

The equivalent real-life situation might be, you're in the middle of making the dinner and your mother rings, at the usual awkward moment. Not wanting to be *completely* ignorant, you drag the 'phone into the kitchen and continue making the dinner. You're making a risotto - you have to watch it like a hawk or it'll burn and you'll be well pissed off/hungry. So you carry on the usual, stopping every minute or so to have a stir at the stuff in the pan. So it's the same with the processor, sort of.

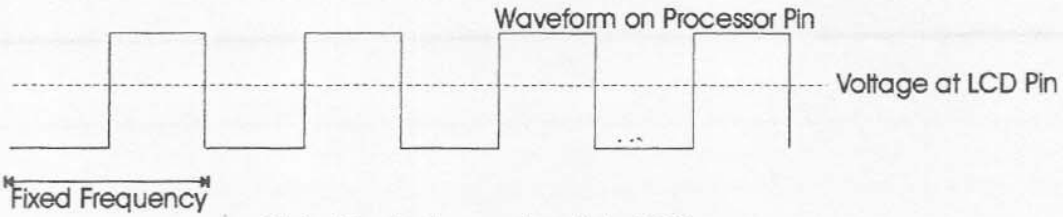
The 'periodic interrupt timer', henceforth known as the 'PIT', forms the heart of a lot of the processes that the DN8000 must perform, keeping everything ticking over. Anyway, all three sets of switches are read at regular intervals as instructed by the PIT. The mute switches are all connected to a latch, forming a neat 'snap-shot' which is checked every 25mS. Similarly, the push switches on the output pots are connected to their own latch, again checked every 25mS. As mentioned earlier, the black keys are slightly different, but only in so far as they don't have an external latch associated with them -

---

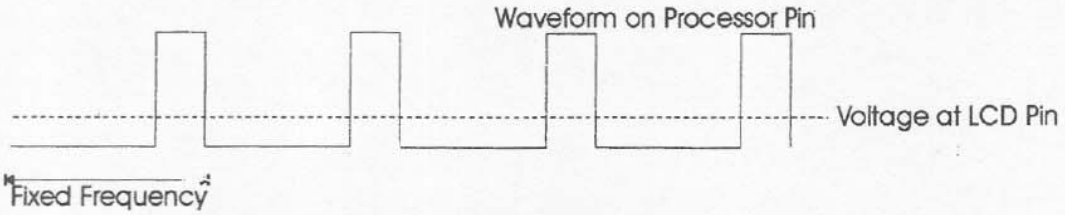
[1] A latch is a 'window' to the outside world (in this case a set of switches) for the microprocessor. It allows many devices to share the same data bus, and only present their information when requested by the microprocessor. If this type of arrangement was not used, then only one set of switches could be connected. Using this arrangement, many such latches can be connected to the same bus. The line used to tell the latch to present its information to the processor is normally known as the 'enable line', or 'chip select line' (/CS).

Contrast Voltage and Adjustment.

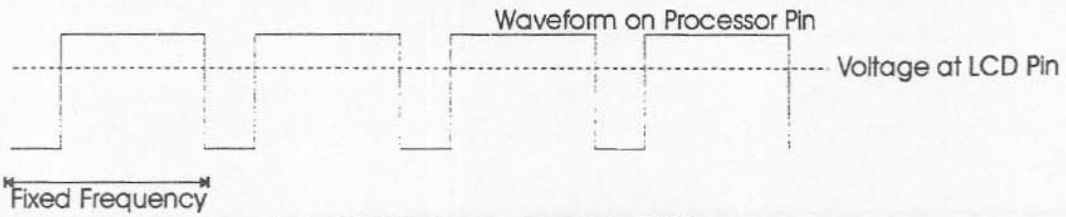
The only other connection to the LCD is the contrast voltage pin. This originates as a special connection on the processor and what appears on this pin is a square wave, generated by the processor using a pulse width modulator. This means that the frequency of the waveform appearing here is fixed, but the duty cycle[4] is variable. This allows the contrast to be adjusted like this...



Duty Cycle Approximately 50%



Duty Cycle Approximately 25%



Duty Cycle Approximately 75%

The waveform which appears on the processor pin is smoothed by a simple resistor and capacitor low-pass filter, turning it into a steady DC level, which is what the LCD requires. Note that the waveform doesn't need to be rectified (the way the AC signal from a mains transformer needs to be rectified with diodes) because it only varies between 0V and +5V - it doesn't go negative the way an AC signal from a transformer does.

[4] The duty cycle is the term used to describe the timing period

The LEDs.

The LEDs are not connected directly to the processor via latches. This would be possible of there were only a few LEDs, but seeing as there are 72 of them, it would all get a bit complex to put them on 9 (72 LEDs, 8 bits of data) separate latches, not to say take up loads of space. Special LED driver chips are used instead. These connect the LEDs up in a matrix arrangement. This method of operation depends on the human eyes inability to follow flashing lights above a certain speed. This 'persistance of vision' means that, if a light is switched off and on above about 50Hz, the eye perceives it as being permanently on.

The LEDs connected to the LED drive chips are never permanently illuminated but are constantly addressed in a cycle by the chip at somewhere between 800Hz and 3kHz. This makes them appear to be permanently on if required. Due to them not all having individual connections, the wiring on the PCB(s) is simplified and the amount of space required is reduced.

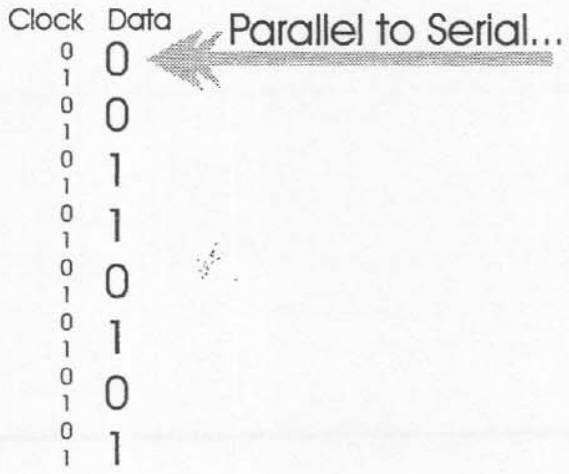
The price paid for this is that the control of which LEDs are on or off by the processor becomes more complex, requiring smarter software to work correctly. The interface between the LED driver chips and the processor is again, a latch, but what is actually happening is slightly different.

Each of the LED drivers only has three connections to the outside world through which to receive information about which LEDs to switch on. This is because it operates through a serial interface, rather than a parallel one. For the uninitiated, this can be explained with another fantastic real life situation.

Picture the following horrific nightmare. You've just told your mother you'll ring her back, yet again (she always falls for the same old excuse), and, *yet again*, you ask her for the phone number. Imagine your extreme terror when, as she goes to tell you the number, eight of her appear and shout a digit each. "Holy Mary mother of God, and all the Saints above!" you yell.

Things would be OK if there were eight of you to listen for a digit each as well, but they're aren't. So she has to tell you it, a digit at a times so you understand and have no excuse not to ring back. This forms the basis of what has to happen to any data to be sent to the LED drivers. The data has to be converted from parallel to serial, along with a clock signal for synchronisation, and the equivalent of chip select lines to select which LED driver is to process the information. The diagram below describes the process more graphically...

Data to be transmitted: 53
Data to be transmitted (in binary): 00110101
00110101



This process is performed by a bit of software within the processor, and allows each of the three LED drivers to be addressed individually using the top three bits of the latch, with the bottom two bits being used to transmit the converted serial data to all three at once, along with a clock signal to let the chips know then a new bit of data is valid. The ins and outs of what is actually transmitted are not particularly important - suffice to say that it works. The control of the brightness of the LEDs is accomplished digitally by sending a number to each of the LED drivers. This is stored in an internal registed on each and affects the rate at which the LEDs are scanned. The slower the rate, the dimmer the LEDs.

The updating of the meters is performed at regular intervals by the processor asking the DSPs (digital signal processors - the

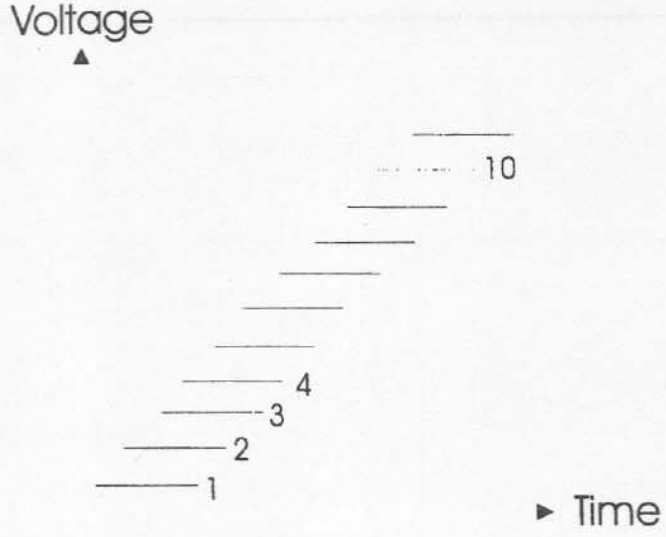
chips which act upon the digitised audio) for levels and, through software changing this to a form to show on the meters. It is told when to do this by the PIT as mentioned in the switches section. This actually happens fifty times a second. All the other LEDs - the mute LEDs and the labels, are only updated when required - i.e. when someone externally calls for them to change by pressing a button, or editing a label (output name).

The Analogue Pots.

The dual input pot, and the five output pots on the DN8000 are not rotary encoders (as you may have noticed) but just normal variable resistor type devices as used on all the analogue gear we make.

However, there are no audio signals present on these pots, just a DC level. This avoids the need to bring any sensitive audio up to the somewhat noisy environment of the front panel (the LCD and LED drivers make a right racket). To allow the position of these devices to be calculated by the processor, it must somehow be able to get a feel for their position at any given time. It does this using its built-in analogue to digital converters.

An analogue to digital convert works to produce a number (which the processor can understand) from an analogue voltage input. Exactly how it accomplishes this is unimportant, but the basic principle is that a the possible range of input voltage is split up into discrete steps, and the one closest to the actual input voltage is used to represent it. The diagram below shows how this applies...

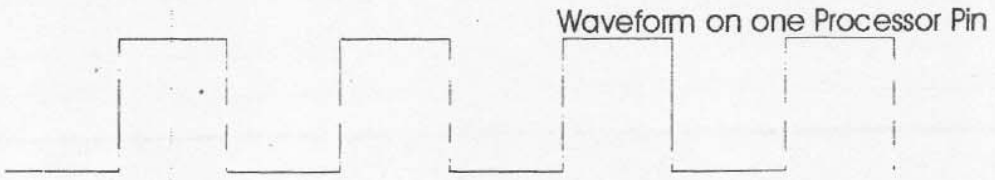


Suppose a pot is slowly turned - on the middle terminal of the pot a slowly rising voltage is produced, as shown in the diagram above. The pots are checked (sampled) on a regular basis using the PIT (periodic interrupt timer - the thing used to

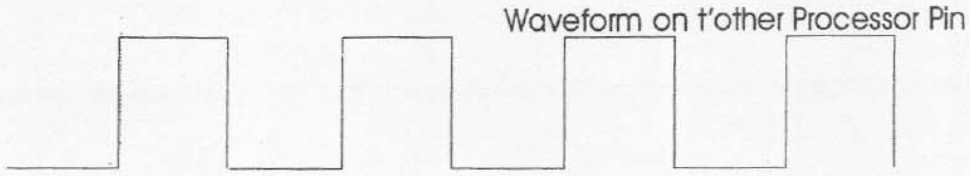
The Encoder.

The reading of the encoder is slightly differe to all the other front panel controls, in that it is not checked t regular intervals using the PIT. Rather, it is allowed interrupt the processor directly, and make it stop what it v s at, just long enough to acknowledge the turning action (w king out the direction and speed using some software). T actual process of what to do with this information happens v en there is time available, so what has to be dealt with whilst he encoder is actually being fiddled with is minimal. This is vhy the meters don't freeze as it is turned.

The encoder is connected directly to the proc ssor on two special pins that are part of a module built int the processor. This module (called the general purpose time or GPT) is able to, firstly interrupt the processor when the sig al on these pins changes (as happened when an encoder turned), and secondly measure the time between any diffe nce in signal on the pins. Although that sound rather stran e, here's what goes on as the encoder is moved...

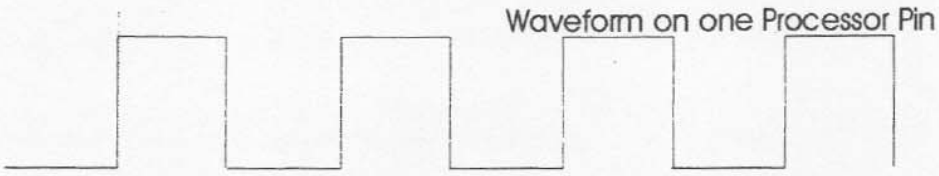


Note the lag between the two signals...

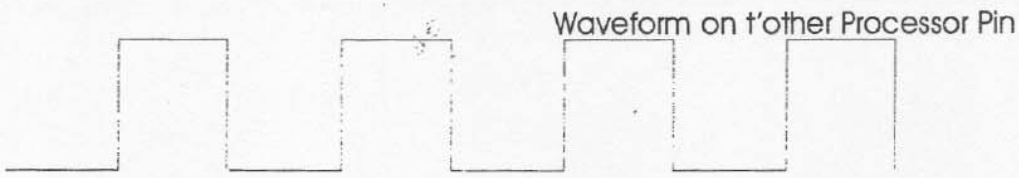


Frequency depends on how fast it's turned

Encoder is turned one direction...



Note the lag between the two signals has been reversed...



Frequency depends on how fast it's turned

Encoder is turned other direction (at same speed)...

The lead or lag of one waveform with respect to the other, and the frequency of the waveform allows the processor to decide which direction the encoder is going in, and how fast it's being turned. Simple as that...

Wing Hayes

13 January, 1998

DN8000: Integrated Test Functions.

A suite of test functions are included in the DN8000 standard software from version 1.10 upwards. These are mainly concerned with confidence and front panel assembly checks.

Entering Test Mode.

Test mode is accessed by holding in the 'Options' key and the 'Edit' key as the unit is switched on. Confirmation of correct entry into Test mode is given by the message

"Test Mode: Press
Selects to Exit! "

The encoder may now be used to choose on of the following test functions. Pressing 'Enter' when the desired test has been selected will run the test, exiting back to the test selection menu upon completion if fully automatic, or pressing 'Enter' a second time will abort/finish the test in a similar way if manual intervention is required.

1: Switch Test.

The first test is

"Switch Test"

and pressing 'Enter' will run the test. The user is prompted to press all the keys separately. This test will run until all the switches have been pressed, or until a short between two switches is found. When running, the screen is divided into three areas representing the six menu keys, the five mute keys, and the five output select keys (built into the pots). Pressing any key will highlight its open rectangle on the screen, either filled completely in, in the case of the menu keys, or filled with the output number icon for mutes and selects. Once pressed, the rectangle will remain underlined.
Any shorts will immediately stop the test and the pins and IC ident number where the short exists will be reported to the screen.
It is unlikely that shorts will exist between keys belonging to different groups, i.e. a menu key is unlikely to be shorted to a mute key - consequently reported information for these combinations is not reported with pin number/IC idents.

2: LED Test.

The second test is

"LED Test"

and pressing 'Enter' will run the test. All the front panel LEDs will be illuminated individually in an automatic cycle, together with an on screen

message detailing the LED that should be on, together with the IC ident and segment number (with reference to the circuit diagram). Finally, all the LEDS are illuminated, all are extinguished and control is handed back to the user. The encoder may now be used to manually run through the test to check any LED if required. To exit the test, press 'Enter' again. Note that the test does not have to run its automatic course - it may be stopped at any point by pressing 'Enter'.

3: Display Test.

The third test is

"Display Test"

and pressing 'Enter' will run the test. Obviously, if the information can be read from the screen, chances are the LCD is functioning correctly, but this test checks the individual row/column addressing of the LCD in case any problems exist that are not immediately visible with text messages. The test will automatically draw a complete horizontal line across the screen, sequentially moving it down row by row, followed by a complete line vertically sequentially moving it across the screen, column by column. This will be followed by two screens of alternate pixels on/off, the all on and finally all off.

A message will now appear to signal that manual control has been handed back to the user. The encoder may now be used to manually run through the test, re-checking any required parts of the display. Pressing 'Enter' will exit the test. In common with the last test this one does not have to run its automatic course - it may also be stopped at any point by pressing 'Enter'.

4: Comms Test.

The fourth test is

"Comms Test"

and pressing 'Enter' will run the test. It is recommended that no external connections are made to the Comms during this test, and that the unit is NOT connected to any other DN8000's. This test is fully automatic and may not be stopped manually. It runs in two parts.

Firstly, the UART is switched into loopback mode where all transmitted messages are internally sent back into the UART, without access to the RS485 driver IC, or the external XLR connections. Special messages are transmitted and verified at a selection of key baud rates, the progress being displayed on the screen. If this is successful, a message is displayed and the second part of the test runs. If not, the test aborts with a failure message.

The second part of the test switches the UART into normal independent operation and reconnects it to the RS485 driver. The driver is switched into loopback mode, and the tests are re-run with it connected to verify it's integrity at key baud rates. Any problems are reported to the screen.

5: Calibrate Pots.

The fifth test is

"Calibrate Pots"

and pressing 'Enter' will start the test. This test removes any errors due to poor tolerances (which are worst at the mid-point) producing battery-backed error offsets to make the pot settings accurate. All pots must be set to their mid-point prior to running the test - opportunity is given for this at the start of the test. Each pot is calibrated in turn - a message will appear saying "Can't Calibrate..." followed by the pot in question. Note that this message will also appear if the pots are not centred. Error compensation will be applied up to a point away from the centre position (effectively allowing the pots to be calibrated to another point away from the centre click), but this is inadvisable.

6: DSP Test Boot.

The sixth test is

"DSP Test Boot"

This test is currently under re-construction, and should not be used.

7: DSP Test Tone.

The seventh test is

"DSP Test Tone"

This test is currently under re-construction, and should not be used.

8: RAM Control.

The eighth test is

"RAM Control"

Pressing 'Enter' will run the test. This test does not actually perform any checks, but is used to selectively reset parts of the battery-backed memory. Once running it is possible to reset any individual user memory to default values, all user memories, options menu only, or everything. For safety, the initialisation will only occur when the test mode is exited. Selecting this test again with the test menu will reset the selection to "Nothing!".

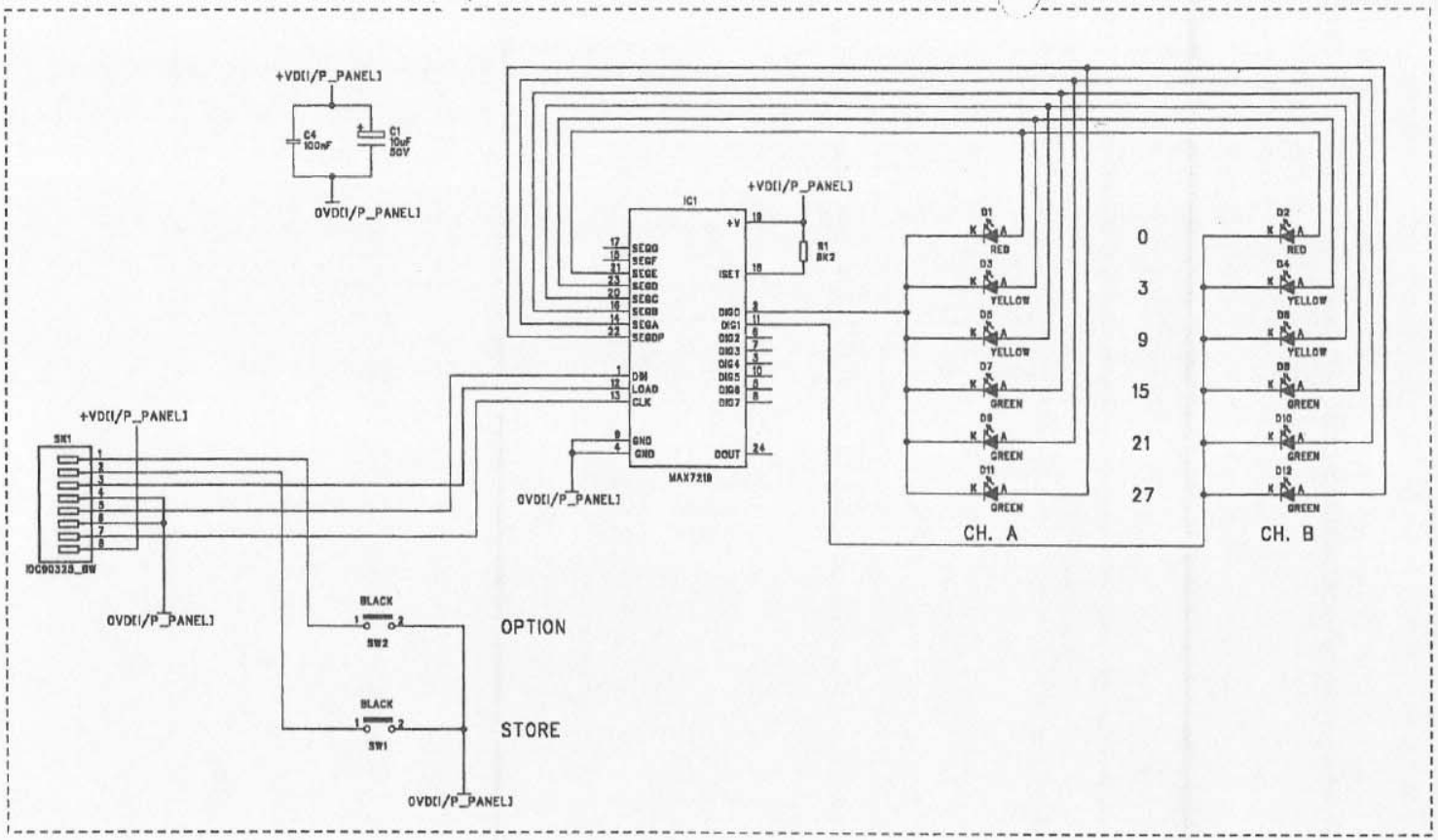
9: Usage Stats.

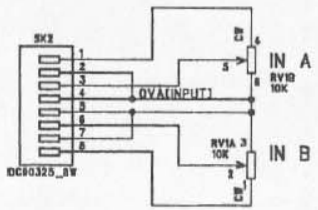
The ninth test is

"Usage Stats"

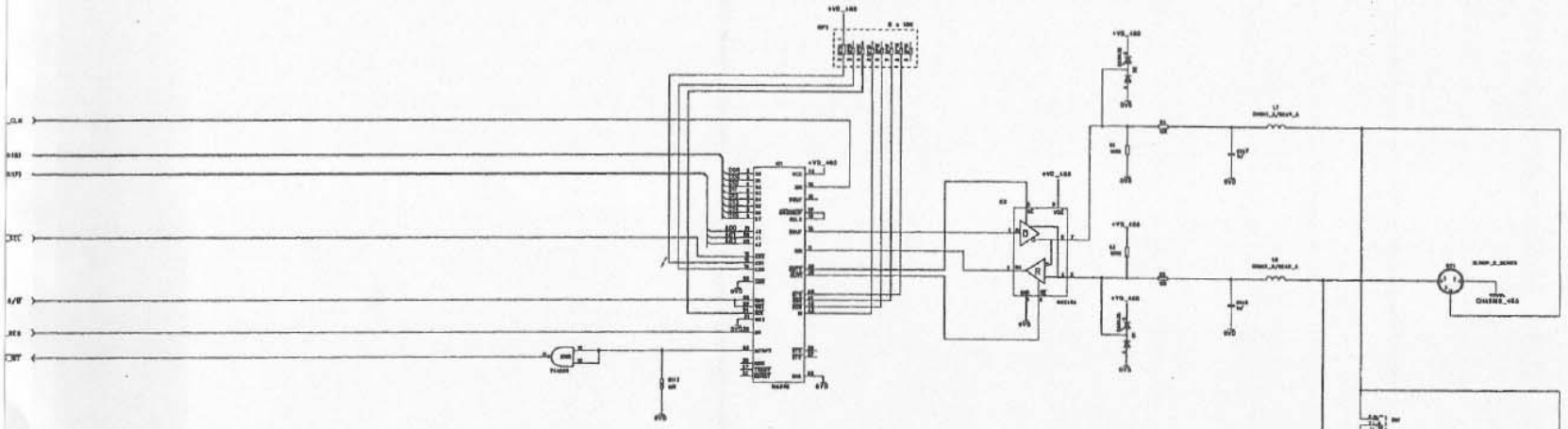
This is a record of how long the unit has been switched on, and how may times. Pressing 'Enter' will show the session counter/clock. Pressing 'Enter' again will exit. To clear this log, select the "Options Only" choice in the "RAM Control" test.

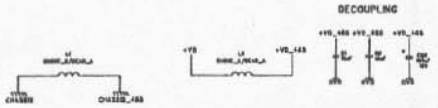
Waring Hayes
27 October, 1997





UNIT: DN8000	KLARK TEKNIK		
TITLE: FRONT PANEL – LEFT BOARD	DRAWN: A.D.W.	DATE: 14/08/97	SHEET: 1 OF 4
BOARD No. 8000A BOARD Issue 4	CHECKED	SHEET Issue 4	DRG No. 8000A Issue 1





UNIT: DN8000				KLARK TEKNIK PLC.		
TITLE: RS-485 INTERFACE CIRCUIT			DRAWN: A.D.W.	DATE: 27/05/97		SHEET: 1 of 8
BOARD No. 8000b	BOARD Iss. 3		CHECKED:	SHEET Iss: 3		DRG No. 8000b3

AssemblyPartNumber	Assembly Description	ComponentPartNumber	PartDesc	Quantity	Text
KTADC-02	CONVENTIONAL ASSY KIT	CON84-TERM11	SMALL VERO PIN	1	V1,
KTADC-02	CONVENTIONAL ASSY KIT	MWK-GENM03-2	SINGLE XLR SHIELDING BKT	2	SK15,SK16
KTADC-02	CONVENTIONAL ASSY KIT	POT33-06502VS	500R MULTI-TURN PRESET	2	VR1,VR2,
KTADC-02	CONVENTIONAL ASSY KIT	RES02-0E0R00	0 OHM LINK (LARGE)	11	LK1,LK2,LK3,LK4,LK5,LK12,LK13,LK17,LK18,LK19,LK20,
KTADC-02	CONVENTIONAL ASSY KIT	RES02-2E3R60	360R RES.M.FILM 1% 0.5W	8	R91,R92,R93,R94,R95,R96,R97,R98,
KTADC-02	CONVENTIONAL ASSY KIT	RES21-84I510	10K SIL (4 RESISTORS)	1	RP3,
KTADC-02	CONVENTIONAL ASSY KIT	RES21-98C510	8 X 1K RES SIL 9 PIN	2	RP1,RP2,
KTADC-02	CONVENTIONAL ASSY KIT	SEM22-78L05	78L05 3/T092	2	REG1,REG3,
KTADC-02	CONVENTIONAL ASSY KIT	SEM22-79L05	79L05 (-5V) T092	2	REG2,REG4,
KTADC-02	CONVENTIONAL ASSY KIT	SEM48-CS5389KP	CS5389KP A/D CONVERTER	2	IC9,IC10,
KTADC-02	CONVENTIONAL ASSY KIT	SEM81-KTR011	HYBRID X 4 FET DRIVE	2	HYB1,HYB2,
KTADC-02	CONVENTIONAL ASSY KIT	TMR21-BEADLINK	FERRITE BEADLINK	3	L5,L6,L7,
KTADC-02	CONVENTIONAL ASSY KIT	TMR23-55Y5S102	1n Noise Suppressor Cap	4	L1,L2,L3,L4,
KTADC-02	CONVENTIONAL ASSY KIT	TMR31-056U050A	INDUCTOR 56UH 50V	2	L8,L9,
KTADC-02	CONVENTIONAL ASSY KIT	WIR81-24SWG	24 SWG TIN. COPPER WIRE	0.0007	JP3-JP6,JP9 JP1(PINS 1 AND 2)JP2 (PINS 1 AND 2)
KTADC-03	DN8000 AD TEST KIT	SEM47-1765D	SERIAL 8 BIT EPROM	1	IC13

AssemblyPartNumber	Assembly Description	ComponentPartNumber	PartDesc	Quantity	Text
KTADC-01	SURFACE MOUNT ASSEMBLY	RES51-4E1R71	SMD 17K4 1% RES 0805	2	R16,R40,
KTADC-01	SURFACE MOUNT ASSEMBLY	RES51-4E2R00	SMD 20K 1% RES 1206	4	R18,R19,R42,R43,
KTADC-01	SURFACE MOUNT ASSEMBLY	RES51-4E2R20	SMD 22K 1% RES 1206	6	R3,R4,R5,R29,R30,R31,
KTADC-01	SURFACE MOUNT ASSEMBLY	RES51-4E3R00	SMD 30K 1% RES 1206	2	R111,R113,
KTADC-01	SURFACE MOUNT ASSEMBLY	RES51-4E3R60	SMD 36K 1% RES 1206	4	R6,R7,R106,R109,
KTADC-01	SURFACE MOUNT ASSEMBLY	RES51-4E3R90	39K .125 1% 1206	2	R17,R41
KTADC-01	SURFACE MOUNT ASSEMBLY	RES52-2E1R00	100R 0.125W 5%SMD	17	R75,R76,R77,R78,R79,R80,R81, R82,R89,R90,R99,R100,R101,R102 ,R103,R104, R105,
KTADC-01	SURFACE MOUNT ASSEMBLY	RES52-2E3R30	330R 0.125W 5%SMD	2	R47,R48,
KTADC-01	SURFACE MOUNT ASSEMBLY	RES52-3E1R50	SMD 1K5 5% RES 1206	1	R83
KTADC-01	SURFACE MOUNT ASSEMBLY	RES52-3E5R10	5K1 0.125W 5%SMD	20	R13,R37,
KTADC-01	SURFACE MOUNT ASSEMBLY	RES52-4E1R50	15K 0.125W 5%SMD	2	R23,R24,
KTADC-01	SURFACE MOUNT ASSEMBLY	RES52-4E2R70	SMD 27K 5% RES 1206	2	R84,R107,
KTADC-01	SURFACE MOUNT ASSEMBLY	RES52-6E1R00	1M 0.125W 5%SMD	2	R85,R86,
KTADC-01	SURFACE MOUNT ASSEMBLY	SEM15-BAT54S	SCHOTTKY BARRIER DIODE	4	D1,D14,D15,D17,
KTADC-01	SURFACE MOUNT ASSEMBLY	SEM15-BAV70	HIGH SPEED DIODE	3	D2,D4,D3
KTADC-01	SURFACE MOUNT ASSEMBLY	SEM34-J112SMD	SMD J112 FET	8	Q1,Q2,Q3,Q4,Q5,Q6,Q7,Q8,
KTADC-01	SURFACE MOUNT ASSEMBLY	SEM51-LM393	SMD DUAL COMPARATOR	1	IC11,
KTADC-01	SURFACE MOUNT ASSEMBLY	SEM51-MC33078D	SMD DUAL OP AMP	4	IC3,IC6,IC7,IC8,
KTADC-01	SURFACE MOUNT ASSEMBLY	SEM51-NE5532D	SMD DUAL OP AMP	2	IC1,IC4,
KTADC-01	SURFACE MOUNT ASSEMBLY	SEM51-NE5534D	SMD OP AMP	2	IC2,IC5,
KTADC-01	SURFACE MOUNT ASSEMBLY	SEM54-0HC125	SMD QUAD BUS BUFFER GATE	1	IC14,
KTADC-01	SURFACE MOUNT ASSEMBLY	SEM56-5202	SMD FPGA PQ100	1	IC12,
KTADC-02	CONVENTIONAL ASSY KIT	CAP12-J410100	1U POLYESTER CAP 0.2" 5%	1	C85,
KTADC-02	CONVENTIONAL ASSY KIT	CAP32-H168100	6N8 63V POLYPROP.CAP 5MM	4	C47,C48,C49,C50,
KTADC-02	CONVENTIONAL ASSY KIT	CAP42-210050LP	10UF 50V LPRAD.ELEC.CAP	9	C67,C68,C69,C70,C71,C72,C73, C74,C77,
KTADC-02	CONVENTIONAL ASSY KIT	CAP42-247063	47UF 63V RAD.ELECCAP	4	C1,C2,C29,C30,
KTADC-02	CONVENTIONAL ASSY KIT	CAP42-310016	100U16V ELEC.RAD.CAP0.1"	3	C75,C76,C104,
KTADC-02	CONVENTIONAL ASSY KIT	CAP42-322025	220UF 25V RAD.ELEC.CAP	12	C6,C7,C11,C13,C27,C28,C34,C35, C39,C41,C83,C84,
KTADC-02	CONVENTIONAL ASSY KIT	CON01-10SMPS	0.1x10 LONG PIN	4	SK9,SK10,SK11,SK12
KTADC-02	CONVENTIONAL ASSY KIT	CON12-08MC	0.05" 8WY RIB. CBL.CON	1	SK3,
KTADC-02	CONVENTIONAL ASSY KIT	CON21-48CFPR	48WAY r/a DIN41612 HD FM	1	SK4,
KTADC-02	CONVENTIONAL ASSY KIT	CON23-10SFSG	HARWIN 10WAY SINGLE ROW	4	SK13,SK14,SK15,SK16
KTADC-02	CONVENTIONAL ASSY KIT	CON31-3FBHI	NC3 FBH1 XLR	2	SK1,SK2,
KTADC-02	CONVENTIONAL ASSY KIT	CON52-08P310	8 PIN DIL IC SOCKET	1	IC13

Sheet1

AssemblyPartNumber	Assembly Description	ComponentPartNumber	PartDesc	Quantity	Text
DN8000-09	DN8000 A TO D BOARD	SEM51-NE5534D	SMD OP AMP	2	IC2,IC5,
DN8000-09	DN8000 A TO D BOARD	SEM54-0HC125	SMD QUAD BUS BUFFER GATE	1	IC14,
DN8000-09	DN8000 A TO D BOARD	SEM56-5202	SMD FPGA PQ100	1	IC12,
DN8000-09	DN8000 A TO D BOARD	SEM81-KTR011	HYBRID X 4 FET DRIVE	2	HYB1,HYB2,
DN8000-09	DN8000 A TO D BOARD	TMR21-BEADLINK	FERRITE BEADLINK	3	L5,L6,L7,
DN8000-09	DN8000 A TO D BOARD	TMR23-55Y5S102	1n Noise Suppressor Cap	4	L1,L2,L3,L4,
DN8000-09	DN8000 A TO D BOARD	TMR31-056U050A	INDUCTOR 56UH 50V	2	L8,L9,
KTADC-01	SURFACE MOUNT ASSEMBLY	CAP05-J247050	47pF CERAM 50V 5% 1206	12	C4,C5,C8,C10,C12,C14,C32,C33,
KTADC-01	SURFACE MOUNT ASSEMBLY	CAP05-K215050	SMD CERAMIC CAP 120615PF	2	C105,C106,
KTADC-01	SURFACE MOUNT ASSEMBLY	CAP05-K222050	SMD CERAMIC CAP 120622PF	2	C9,C37,
KTADC-01	SURFACE MOUNT ASSEMBLY	CAP05-K310050	SMD CER. CAP 1206 100PF	4	C43,C44,C45,C46,
KTADC-01	SURFACE MOUNT ASSEMBLY	CAP05-K333050	330pf SMT CERAMIC CAP	2	C3,C31
KTADC-01	SURFACE MOUNT ASSEMBLY	CAP05-K510050	SMD CERAMIC CAP 120610NF	13	C78,C79,C80,C94,C95,C96,C97,C98,C99,C100, C101,C102,C103,
KTADC-01	SURFACE MOUNT ASSEMBLY	CAP05-K610050	SMD CER. CAP 1206 100NF	32	C15,C16,C17,C18,C19,C20,C21, C22,C23,C24,C25,C26, C51,C52,C53,C54,C55,C56,C57, C58, C86,C87,C88,C89,C90,C91,C92, C93, C107,C108,C109,C110,
KTADC-01	SURFACE MOUNT ASSEMBLY	CAP05-K622050	SMD CER. CAP 1206 220NF	10	C59,C60,C61,C62,C63,C64,C65,C66,C81,C82,
KTADC-01	SURFACE MOUNT ASSEMBLY	PCK-ADC-2	DN8000 ADC PCB	1	
KTADC-01	SURFACE MOUNT ASSEMBLY	RES51-1E3R90	SMD 39R 1% RES 1206	8	R59,R60,R61,R62,R71,R72,R73,R7
KTADC-01	SURFACE MOUNT ASSEMBLY	RES51-2E1R20	SMD 120R 1% RES 1206	4	R1,R2,R27,R28,
KTADC-01	SURFACE MOUNT ASSEMBLY	RES51-2E3R00	300R 1% SMT RESISTOR	2	R58,R70
KTADC-01	SURFACE MOUNT ASSEMBLY	RES51-2E4R70	SMD 470R 1% RES 1206	10	R8,R9,R32,R33,R55,R56,R57,R67, R68,R69,
KTADC-01	SURFACE MOUNT ASSEMBLY	RES51-2E5R60	560R 1% SMT RESISTOR	2	R12,R36
KTADC-01	SURFACE MOUNT ASSEMBLY	RES51-2E6R80	SMD 680R 1% RES 1206	2	R25,R26,
KTADC-01	SURFACE MOUNT ASSEMBLY	RES51-2E7R50	SMD 750R 1% RES 1206	4	R49,R50,R63,R64,
KTADC-01	SURFACE MOUNT ASSEMBLY	RES51-3E1R11	SMD 1K10 1% RES 0805	2	R20,R44,
KTADC-01	SURFACE MOUNT ASSEMBLY	RES51-3E1R21	SMD 1K21 1% RES 0805	4	R51,R52,R108,R110,
KTADC-01	SURFACE MOUNT ASSEMBLY	RES51-3E1R50	SMD 1K5 1% RES 1206	5	R53,R54,R65,R66
KTADC-01	SURFACE MOUNT ASSEMBLY	RES51-3E2R00	SMD 2K 1% RES 1206	4	R10,R11,R34,R35,
KTADC-01	SURFACE MOUNT ASSEMBLY	RES51-3E6R61	SMD 6K65 1% RES 0805	2	R15,R39,
KTADC-01	SURFACE MOUNT ASSEMBLY	RES51-4E1R00	10K 0.125W 1% SMD	6	R14,R38,R112,R114,R87,R88,

AssemblyPartNumber	Assembly Description	ComponentPartNumber	PartDesc	Quantity	Text
)N8000-09	DN8000 A TO D BOARD	RES21-84I510	10K SIL (4 RESISTORS)	1	RP3,
)N8000-09	DN8000 A TO D BOARD	RES21-98C510	8 X 1K RES SIL 9 PIN	2	RP1,RP2,
)N8000-09	DN8000 A TO D BOARD	RES51-1E3R90	SMD 39R 1% RES 1206	8	R59,R60,R61,R62,R71,R72,R73,R7
)N8000-09	DN8000 A TO D BOARD	RES51-2E1R20	SMD 120R 1% RES 1206	4	R1,R2,R27,R28,
)N8000-09	DN8000 A TO D BOARD	RES51-2E3R60	SMD 360R 1% RES 1206	2	R58,R70,
)N8000-09	DN8000 A TO D BOARD	RES51-2E4R70	SMD 470R 1% RES 1206	10	R8,R9,R32,R33,R55,R56,R57,R67, R68,R69,
)N8000-09	DN8000 A TO D BOARD	RES51-2E6R80	SMD 680R 1% RES 1206	2	R25,R26,
)N8000-09	DN8000 A TO D BOARD	RES51-2E7R50	SMD 750R 1% RES 1206	4	R49,R50,R63,R64,
)N8000-09	DN8000 A TO D BOARD	RES51-3E1R11	SMD 1K10 1% RES 0805	2	R20,R44,
)N8000-09	DN8000 A TO D BOARD	RES51-3E1R21	SMD 1K21 1% RES 0805	6	R12,R36,R51,R52,R108,R110,
)N8000-09	DN8000 A TO D BOARD	RES51-3E1R50	SMD 1K5 1% RES 1206	5	R53,R54,R65,R66
)N8000-09	DN8000 A TO D BOARD	RES51-3E2R00	SMD 2K 1% RES 1206	4	R10,R11,R34,R35,
)N8000-09	DN8000 A TO D BOARD	RES51-3E6R61	SMD 6K65 1% RES 0805	2	R15,R39,
)N8000-09	DN8000 A TO D BOARD	RES51-4E1R00	10K 0.125W 1% SMD	6	R14,R38,R112,R114,R87,R88,
)N8000-09	DN8000 A TO D BOARD	RES51-4E1R71	SMD 17K4 1% RES 0805	2	R16,R40,
)N8000-09	DN8000 A TO D BOARD	RES51-4E2R00	SMD 20K 1% RES 1206	4	R18,R19,R42,R43,
)N8000-09	DN8000 A TO D BOARD	RES51-4E2R20	SMD 22K 1% RES 1206	6	R3,R4,R5,R29,R30,R31,
)N8000-09	DN8000 A TO D BOARD	RES51-4E3R00	SMD 30K 1% RES 1206	2	R111,R113,
)N8000-09	DN8000 A TO D BOARD	RES51-4E3R60	SMD 36K 1% RES 1206	4	R6,R7,R106,R109,
)N8000-09	DN8000 A TO D BOARD	RES52-2E1R00	100R 0.125W 5%SMD	17	R75,R76,R77,R78,R79,R80,R81,R82,R89,R90,R99,R100,R101,R102,R103,R104, R105,
)N8000-09	DN8000 A TO D BOARD	RES52-3E1R00	1K 0.125W 5%SMD	2	R47,R48,
)N8000-09	DN8000 A TO D BOARD	RES52-3E5R10	5K1 0.125W 5%SMD	20	R13,R37,
)N8000-09	DN8000 A TO D BOARD	RES52-4E1R50	15K 0.125W 5%SMD	2	R23,R24,
)N8000-09	DN8000 A TO D BOARD	RES52-4E2R70	SMD 27K 5% RES 1206	2	R84,R107,
)N8000-09	DN8000 A TO D BOARD	RES52-6E1R00	1M 0.125W 5%SMD	2	R85,R86,
)N8000-09	DN8000 A TO D BOARD	SEM15-BAT54S	SCHOTTKY BARRIER DIODE	4	D1, D14,D15,D17,
)N8000-09	DN8000 A TO D BOARD	SEM15-BAV70	HIGH SPEED DIODE	3	D2,D4,D3
)N8000-09	DN8000 A TO D BOARD	SEM22-78L05	78L05 3/T092	2	REG1,REG3,
)N8000-09	DN8000 A TO D BOARD	SEM22-79L05	79L05 (-5V) T092	2	REG2,REG4,
)N8000-09	DN8000 A TO D BOARD	SEM34-J112SMD	SMD J112 FET	8	Q1,Q2,Q3,Q4,Q5,Q6,Q7,Q8,
)N8000-09	DN8000 A TO D BOARD	SEM47-1765D	SERIAL 8 BIT EPROM	1	IC13,
)N8000-09	DN8000 A TO D BOARD	SEM48-CS5389KP	CS5389KP A/D CONVERTER	2	IC9,IC10,
)N8000-09	DN8000 A TO D BOARD	SEM51-LM393	SMD DUAL COMPARATOR	1	IC11,
)N8000-09	DN8000 A TO D BOARD	SEM51-MC33078D	SMD DUAL OP AMP	4	IC3,IC6,IC7,IC8,
)N8000-09	DN8000 A TO D BOARD	SEM51-NE5532D	SMD DUAL OP AMP	2	IC1,IC4,

AssemblyPartNumber	Assembly Description	ComponentPartNumber	PartDesc	Quantity	Text
DN8000-08	Packing Kit	PAC01-1U	CARDBOARD BOX 1U SIZE	1	
DN8000-08	Packing Kit	PAC81-POLY1U	POLY PACKS TYPE C 1U	2	
DN8000-08	Packing Kit	PAC93-MAINS	MAINS WARNING LABEL	1	
DN8000-08	Packing Kit	PWR21-P20100	MAINS PLUG LEAD	1	
DN8000-09	DN8000 A TO D BOARD	CAP05-J247050	47pF CERAM 50V 5% 1206	12	C4,C5,C8,C10,C12,C14,C32,C33, C36,C38,C40,C42,
DN8000-09	DN8000 A TO D BOARD	CAP05-K215050	SMD CERAMIC CAP 120615PF	2	C105,C106,
DN8000-09	DN8000 A TO D BOARD	CAP05-K222050	SMD CERAMIC CAP 120622PF	2	C9,C37,
DN8000-09	DN8000 A TO D BOARD	CAP05-K310050	SMD CER. CAP 1206 100PF	4	C43,C44,C45,C46,
DN8000-09	DN8000 A TO D BOARD	CAP05-K510050	SMD CERAMIC CAP 120610NF	13	C78,C79,C80,C94,C95,C96,C97,C9 8,C99,C100, C101,C102,C103,
DN8000-09	DN8000 A TO D BOARD	CAP05-K610050	SMD CER. CAP 1206 100NF	32	C15,C16,C17,C18,C19,C20,C21,C2 2,C23,C24,C25,C26,C51,C52,C53, C54,C55,C56,C57,C58,C86,C87,C8 8,C89,C90,C91,C92, C93,C107,C108,C109,C110,
DN8000-09	DN8000 A TO D BOARD	CAP05-K622050	SMD CER. CAP 1206 220NF	10	C59,C60,C61,C62,C63,C64,C65, C66,C81,C82,
DN8000-09	DN8000 A TO D BOARD	CAP12-J410100	1U POLYESTER CAP 0.2" 5%	1	C85,
DN8000-09	DN8000 A TO D BOARD	CAP32-H168100	6N8 63V POLYPROP.CAP 5MM	4	C47,C48,C49,C50,
DN8000-09	DN8000 A TO D BOARD	CAP42-210050LP	10UF 50V LPRAD.ELEC.CAP	9	C67,C68,C69,C70,C71,C72,C73,C7 4,C77,
DN8000-09	DN8000 A TO D BOARD	CAP42-247063	47UF 63V RAD.ELECCAP	4	C1,C2,C29,C30,
DN8000-09	DN8000 A TO D BOARD	CAP42-310016	100U16V ELEC.RAD.CAP0.1"	1	C104,
DN8000-09	DN8000 A TO D BOARD	CAP42-322025	220UF 25V RAD.ELEC.CAP	12	C6,C7,C11,C13,C27,C28,C34,C35, C39,C41,C83,C84,
DN8000-09	DN8000 A TO D BOARD	CAP43-347016	470U 16V RAD.ELEC.CAP	2	C75,C76,
DN8000-09	DN8000 A TO D BOARD	CON12-08MC	0.05" 8WY RIB. CBL.CON	1	SK3,
DN8000-09	DN8000 A TO D BOARD	CON21-48CFPR	48WAY r/a DIN41612 HD FM	1	SK4,
DN8000-09	DN8000 A TO D BOARD	CON31-3FBHI	NC3 FBH1 XLR	2	SK1,SK2,
DN8000-09	DN8000 A TO D BOARD	CON84-TERM11	SMALL VERO PIN	1	V1,
DN8000-09	DN8000 A TO D BOARD	MWK-GENM01-2	XLR SHIELDING BRACKET	1	SK1,SK2
DN8000-09	DN8000 A TO D BOARD	PCK-ADC-2	DN8000 ADC PCB	1	
DN8000-09	DN8000 A TO D BOARD	POT33-06502VS	500R MULTI-TURN PRESET	2	VR1,VR2,
DN8000-09	DN8000 A TO D BOARD	RES02-0E0R00	0 OHM LINK (LARGE)	11	LK1,LK2,LK3,LK4,LK5,LK12,LK13,L K17,LK18,LK19,LK20,
DN8000-09	DN8000 A TO D BOARD	RES02-2E3R60	360R RES.M.FILM 1% 0.5W	8	R91,R92,R93,R94,R95,R96,R97, R98,

AssemblyPartNumber	Assembly Description	ComponentPartNumber	PartDesc	Quantity	Text
DN8000-06	Main Chassis Assembly	FAS03-M30SZE	M3 EXTERNAL STAR WASHER	27	MAIN CHASSIS TO SUB CHASSIS SIDE FIXINGS, POWER SWTCH BRD TO CHASSIS, PSU TO CHASSIS, MAIN BRD TO CHASSIS, INTERFACE BRD TO CHASSIS, FAN TO CHASSIS, ADC BRD TO CHASSIS,
DN8000-06	Main Chassis Assembly	FAS31-0725866	M3x3.5mm PUSH RIVET WHT	2	PSU INSULATING COVER FIXINGS
DN8000-06	Main Chassis Assembly	FRN58-4302RED	RECTANGULAR CAP SMALL	1	POWER SWITCH CAP FIX TO 2 PART EXTENDER ARM BREAK OFF FROM FRONT PCB
DN8000-06	Main Chassis Assembly	HSK01-TV5	HEATSINK TV5	1	
DN8000-06	Main Chassis Assembly	HSK11-4T12MWS	12 VOLT FAN	1	FAN
DN8000-06	Main Chassis Assembly	HSK22-T220P045	MOUNTING KITS TO22	2	
DN8000-06	Main Chassis Assembly	HWR03-M30DP	MOUNTING KITS T022	2	
DN8000-06	Main Chassis Assembly	HWR11-030601	M3x0.055" BIVAR PVC SPAC	4	
DN8000-06	Main Chassis Assembly	HWR99-DY352557	SWITCH COUPLING DYNACORD	1	MAINS SWITCH COUPLING
DN8000-06	Main Chassis Assembly	L1-PSU09	S/MODEPSU+5V+18V-18V 40W	1	
DN8000-06	Main Chassis Assembly	MWK-DN80M04	DN8000 MAIN CHASSIS	1	
DN8000-06	Main Chassis Assembly	MWK-DN80M08	DN8000 PSU COVER	1	
DN8000-06	Main Chassis Assembly	PAC93-EARTH	EARTH SYMBOL LABEL	1	Adjacent to earth screw.
DN8000-06	Main Chassis Assembly	PWR13-CR2430	3V LITHIUM CELL VERT PCB	1	BATT1
DN8000-06	Main Chassis Assembly	SEM22-7805CT	LM7805CT	1	REG 1
DN8000-06	Main Chassis Assembly	SEM22-79M05CKC	-5V T0220	1	REG 6
DN8000-07	Test Kit	PWR31-20T0050	FUSE 500MA TIME DELAY	2	MAIN FUSE + SPARE BOTH GO IN POWER INLET DRAWER
DN8000-07	Test Kit	RES01-4E1R00	10K RES.M.FILM 5% 0.4W	2	R54,R55. Fit if ADC has analogue gain control.
DN8000-07	Test Kit	SEM47-17128D	SERIAL EPROM	1	IC13 **** PROGRAM BEFORE FIT ****
DN8000-07	Test Kit	SEM47-27C101G	27C101G 1Mb EPROM	2	IC18,IC19,**** PROGRAM BEFORE FIT ****
DN8000-08	Packing Kit	DOC02-DN8000/A	DN8000 MANUAL	1	
DN8000-08	Packing Kit	FAS01-M3006CPB	M3 X 6 CSK POZI BLK	2	TOP COVER FIXINGS
DN8000-08	Packing Kit	FAS01-M3006PPB	M3 X 6 P/POZI BLK	8	TOP COVER REAR & SIDE
DN8000-08	Packing Kit	MWK-DN80M07	DN8000 COVER	1	

AssemblyPartNumber	Assembly Description	ComponentPartNumber	PartDesc	Quantity	Text
DN8000-05	Sub-Chassis Assembly	HWR11-430810B	10MM SPACER	1	
DN8000-05	Sub-Chassis Assembly	MWK-DN80M05	DN8000 SUB CHASSIS	1	
DN8000-05	Sub-Chassis Assembly	MWK-DN80M09-1	COMPLETE FRONT PANEL	1	
DN8000-05	Sub-Chassis Assembly	SEM02-16LED04Y	2x16 LCD YEL LED LIGHT	1	LCD
DN8000-06	Main Chassis Assembly	ACBLK-0020-3	I/P POT TO MAIN BOARD	1	MAIN BRD TO INPUT POT BRD
DN8000-06	Main Chassis Assembly	ACBLK-0015-1	PF50/12-PF50/12 x 127mm	1	MAIN BRD TO LEVEL & MUTE BRD
DN8000-06	Main Chassis Assembly	ACBLK-0016-1	PF50/8-PF50/8 x 290mm	1	MAIN BRD TO LH BAR & SWTCH BRD
DN8000-06	Main Chassis Assembly	ACBLK-0017-1	HARNESS 17	1	MAIN BRD TO RH BAR & SWTCH BRD
DN8000-06	Main Chassis Assembly	ACBLK-0018-1	PF50/12-PF50/12 x 82mm	1	MAIN BRD TO ADC BRD - POWER
DN8000-06	Main Chassis Assembly	ACBLK-0019-1	PF50/26-PF50/26 x 61mm	1	MAIN BRD TO ADC BRD - SIGNAL
DN8000-06	Main Chassis Assembly	ACBLK-0021-1	PF50/8-PF50/8 x 370mm	1	MAIN BRD TO OUTPUT POTS 1 & 2
DN8000-06	Main Chassis Assembly	ACBLK-0024-1	TRANS/14-PF50/14 x 100mm	1	MAIN BRD TO LCD PANEL
DN8000-06	Main Chassis Assembly	ACBLK-0025-1	IEC - SWT - 3-POLE MOLEX	1	POWER INLET TO POWER SWITCH
DN8000-06	Main Chassis Assembly	CON01-02SFC	2WY 0.1" FML CON	1	
DN8000-06	Main Chassis Assembly	FAS01-M2508TPZ	M2.5x8 REC PAN TRI/TAP	14	XLRs TO REAR PANEL
DN8000-06	Main Chassis Assembly	FAS01-M2508TPZ	M2.5x8 REC PAN TRI/TAP	4	
DN8000-06	Main Chassis Assembly	FAS01-M2512PPZ	M2.5x12mm PAN HEAD BZP	4	M2.5 X 6MM PAN HEAD SCREW BZP INPUT BRD TO CHASSIS INTERFACE BRD TO CHASSIS
DN8000-06	Main Chassis Assembly	FAS01-M3006CPB	M3 X 6 CSK POZI BLK	2	MAIN CHASSIS TO SUB CHASSIS BOTTOM FIXINGS
DN8000-06	Main Chassis Assembly	FAS01-M3006PPZ	SCREW M3*6 P/HD BZP	12	POWER SWTCH BRD TO CHASSIS PSU TO CHASSIS MAIN BRD TO CHASSIS INTERFACE BRD TO CHASSIS
DN8000-06	Main Chassis Assembly	FAS01-M3008PPZ	M3x8 P/POZI ZINC	2	MAIN BRD TO CHASSIS @ EMC1, EMC2,
DN8000-06	Main Chassis Assembly	FAS01-M3012	M3 X 12 TMP/PRF SYS ZERO	1	REAR PANEL EARTH BOND
DN8000-06	Main Chassis Assembly	FAS01-M3025PPZ	M3x25 REC P/POZI ZINC	4	
DN8000-06	Main Chassis Assembly	FAS02-M30	M3 PCB CLINCH NUT	4	
DN8000-06	Main Chassis Assembly	FAS02-M30NZ	M3 NYLOC	1	REAR PANEL EARTH BOND

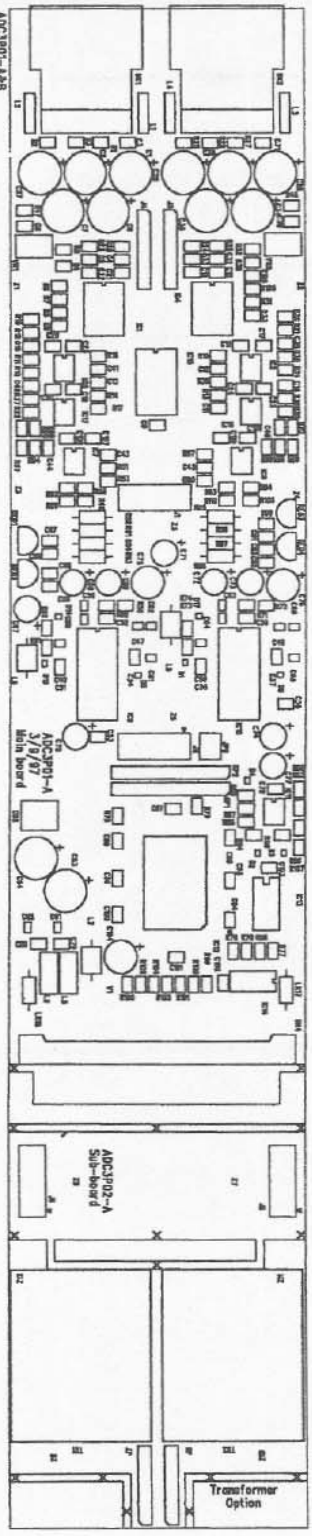
AssemblyPartNumber	Assembly Description	ComponentPartNumber	PartDesc	Quantity	Text
DN8000-04	Front Board Assembly	POT9D-614B14BX	DC POT 10K LIN DET 6mm P	1	RV1
DN8000-04	Front Board Assembly	RES01-1E1R00	10R RES. MFILM 5% 0.4W	1	R14
DN8000-04	Front Board Assembly	RES01-1E2R20	22R RES MFILM 5% 0.4W	1	R15
DN8000-04	Front Board Assembly	RES01-3E7R50	7K5 RES.M.FILM 5% 0.4W	1	R3
DN8000-04	Front Board Assembly	RES01-3E8R20	8K2 RES.M.FILM 5% 0.4W	2	R1,R2
DN8000-04	Front Board Assembly	RES02-0E0R00	0 OHM LINK (LARGE)	1	LK1
DN8000-04	Front Board Assembly	SEM01-L934RED	3MM RED HIGH INT	5	D68,D69,D70,D71,D72
DN8000-04	Front Board Assembly	SEM01-MV53124A	YEL 6 x 3.6mm RS 587 119	30	D38,D39,D40,D41,D42,D43,D44, D45,D46,D47,D48,D49,D50,D51, D52,D53,D54,D55,D56,D57,D58, D59,D60,D61,D62,D63,D64,D65, D66,D67
DN8000-04	Front Board Assembly	SEM01-TLG124	GREEN LED 3mm DOME HEAD	16	D7,D8,D9,D10,D11,D12,D28,D29, D30,D31,D32,D33,D34,D35,D36, D37
DN8000-04	Front Board Assembly	SEM01-TLSU124	HI-EFFICIENCY RED 3mmLED	7	D1,D2,D13,D14,D15,D16,D17
DN8000-04	Front Board Assembly	SEM01-TLY124	LED YEL 3mm DOME HEAD	14	D3,D4,D5,D6,D18,D19,D20,D21,D22,D23,D24,D25,D26,D27
DN8000-04	Front Board Assembly	SWT01-SUJ2MC	SUJ 2 POLE (MOM)	5	SW7,SW8,SW9,SW10,SW11
DN8000-04	Front Board Assembly	SWT03-2P06R	LATCHING PUSH SWITCH	1	SW12
DN8000-04	Front Board Assembly	SWT04-TP23MOV	TP2301	6	SW1,SW2,SW3,SW4,SW5,SW6
DN8000-05	Sub-Chassis Assembly	DN8000-04	Front Board Assembly	1	
DN8000-05	Sub-Chassis Assembly	FAS01-M2506PPB	2.5x6mm PAN BLK P/TEC	2	M2.5 X 6mm PAN HEAD SCREW LCD TO SUB CHASSIS
DN8000-05	Sub-Chassis Assembly	FAS01-M3006PPZ	SCREW M3*6 P/HD BZP	4	LH & RH FRONT BRD TO SUB CHASSIS
DN8000-05	Sub-Chassis Assembly	FAS01-M3016PPZ	M3*16 BZP M3*16 BZP	1	FRONT PANEL TO SUB CHASSIS GROUND LINK
DN8000-05	Sub-Chassis Assembly	FAS01-M4008CPB	M4 X 8 POZI CSK BRT/NIKL	4	FRONT PANEL TO SUB CHASSIS
DN8000-05	Sub-Chassis Assembly	FAS03-M30SZE	M3 EXTERNAL STAR WASHER	5	FRONT BRD TO SUB CHASSIS, SUB CHASSIS GROUND LINK
DN8000-05	Sub-Chassis Assembly	FRN11-CAPBLKL	SIFAM 11MM CAP	6	
DN8000-05	Sub-Chassis Assembly	FRN11-PD6BLKNL	SIFAM 11MM PUSH-ON KNOB	5	
DN8000-05	Sub-Chassis Assembly	FRN11-PX6BLKNL	SIFAM 11MM PUSH-ON KNOB	1	
DN8000-05	Sub-Chassis Assembly	FRN15-LI8BLKNL	SIFAM 15MM PUSH-ON KNOB	1	
DN8000-05	Sub-Chassis Assembly	FRN39-348055	LARGE ENC KNOB DYNACORD	1	
DN8000-05	Sub-Chassis Assembly	FRN41-LREDMUTE	SIFAM PUSH BUTTON [MUTE]	5	FIX TO MUTE SWITCHES
DN8000-05	Sub-Chassis Assembly	FRN58-2301BLK	TP2301 SWITCH CAP BLACK	6	

Sheet1

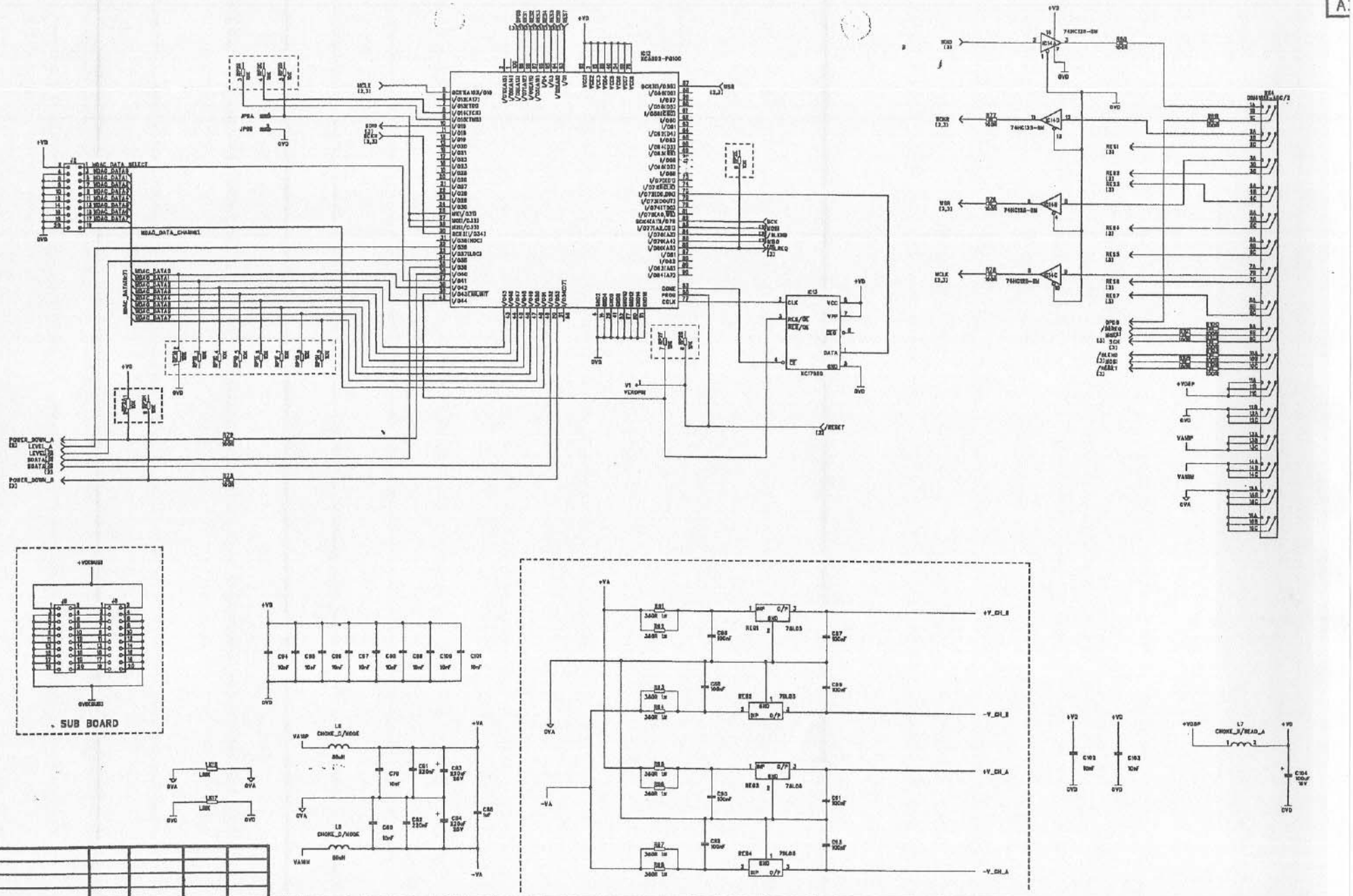
AssemblyPartNumber	Assembly Description	ComponentPartNumber	PartDesc	Quantity	Text
DN8000-02	Main Board Assembly	SEM41-NE5532	NE5532P	8	IC33,IC34,IC35,IC36,IC37,IC40,IC41,IC42,
DN8000-02	Main Board Assembly	SEM44-00HC00	74HC00 HIGH SPEED LOGIC	1	IC6,
DN8000-02	Main Board Assembly	SEM44-00HC14	74HC14 HIGH SPEED LOGIC	1	IC3,
DN8000-02	Main Board Assembly	SEM44-00HC32	74HC32 HIGH SPEED LOGIC	1	IC15,
DN8000-02	Main Board Assembly	SEM44-0HC138	74HC138 HIGH SPEED LOGIC	1	IC7,
DN8000-02	Main Board Assembly	SEM46-MAX691	MAX691CPE PSU SUPERVISOR	1	IC5,
DN8000-02	Main Board Assembly	SEM46-MX485ECP	RS485 XCEIVER ESD	1	IC2,
DN8000-02	Main Board Assembly	SEM46-PC16550C	16C550 UART 44PIN PLCC	1	IC1,
DN8000-02	Main Board Assembly	SEM46-SM5843AP	SM5843AP O/S FILTER	3	IC25,IC26,IC27,
DN8000-02	Main Board Assembly	SEM47-4325685	32K X 8 CMOS RAM	2	IC16,IC17,
DN8000-02	Main Board Assembly	SEM48-PCM1702P	PCM1702P D/A CONVERT	5	IC28,IC29,IC30,IC31,IC32,
DN8000-02	Main Board Assembly	SEM81-KTR019	KTR019 BAL O/P HYBRID	5	HY1,HY2,HY3,HY4,HY5,
DN8000-02	Main Board Assembly	SEM91-MOD12M28	CRYSTAL OSC MOD12.288MHz	1	XTAL2
DN8000-02	Main Board Assembly	SEM91-XTAL40K0	40KHZ WATCH XTAL 8x3mm	1	XTAL1,
DN8000-02	Main Board Assembly	SWT54-2P005V	SPDT SIDE SLIDE SWTCH	1	SW1
DN8000-02	Main Board Assembly	TMR21-BEADLINK	FERRITE BEADLINK	13	L10,L11,L12,L15, L1,L2,L3,L4,L5,L6,L7,L8,L9
DN8000-02	Main Board Assembly	TMR23-55Y5S102	1n Noise Suppressor Cap	10	FL8,FL9,FL10, FL1,FL2,FL3,FL4,FL5,FL6,FL7
DN8000-02	Main Board Assembly	TMR31-056U050A	INDUCTOR 56UH 50V	2	L13,L14
DN8000-03	Front Board SMT Assembly	PCK800-8000A-3	DN8000 FRONT PCB	1	PCB
DN8000-03	Front Board SMT Assembly	SEM51-MAX7219	SMD LED DRIVER	3	IC1,IC2,IC3
DN8000-04	Front Board Assembly	A3-XC024	EC11 ENCODER	1	EN1
DN8000-04	Front Board Assembly	CAP01-GK610100	100N CERAMIC 0.1"	2	C13,C14
DN8000-04	Front Board Assembly	CAP12-J247100	47N POLYESTER CAP 0.2"	1	C8,
DN8000-04	Front Board Assembly	CAP12-J310100	100N POLYESTER CAP 0.2"	4	C4,C5,C6,C7
DN8000-04	Front Board Assembly	CAP42-210050LP	10UF 50V LPRAD.ELEC.CAP	3	C1,C2,C3
DN8000-04	Front Board Assembly	CON02-03SMVL	3WY 0.156" LKG ML HDR	1	***** REMOVE MIDDLE PIN ****J2
DN8000-04	Front Board Assembly	CON12-08MC	0.05" 8WY RIB. CBL.CON	3	SK1,SK2,SK3,
DN8000-04	Front Board Assembly	CON12-12MV	12x0.050"PICOFLEX HEADER	2	SK6,SK9
DN8000-04	Front Board Assembly	CON12-16MV	16x0.050"PICOFLEX HEADER	1	SK7
DN8000-04	Front Board Assembly	CON12-26MV	26x0.050"PICOFLEX HEADER	1	SK10
DN8000-04	Front Board Assembly	CON21-48CMPR	48 WAY r/a DIN41612 HDR	1	SK8
DN8000-04	Front Board Assembly	CON84-TERM11	SMALL VERO PIN	2	+BL1,BL2
DN8000-04	Front Board Assembly	HWR11-LED3MM08	8mm LED SPACER	37	FIT TO D1 TO D37,
DN8000-04	Front Board Assembly	POT91-614B01DS	POT 10K LIN DET PUSH 6mm	5	RV2,RV3,RV4,RV5,RV6

AssemblyPartNumber	Assembly Description	ComponentPartNumber	PartDesc	Quantity	Text
)N8000-02	Main Board Assembly	RES01-2E4R70	470R RES.M.FILM 5% 0.4W	1	R82
)N8000-02	Main Board Assembly	RES01-3E1R00	1K RES.M.FILM 5%0.4W	9	R135,R136,R137,R138,R139, R62,R63,R64,R86
)N8000-02	Main Board Assembly	RES01-3E1R50	1K5 RES.M.FILM 5% 0.4W	1	R9
)N8000-02	Main Board Assembly	RES01-3E2R20	2K2 RES.M.FILM 5% 0.4W	1	R17
)N8000-02	Main Board Assembly	RES01-3E3R00	3K RES.M.FILM 5% 0.4W	5	R130,R131,R132,R133,R134
)N8000-02	Main Board Assembly	RES01-3E4R70	4K7 RES.M.FILM 5% 0.4W	3	R7,R128,R153
)N8000-02	Main Board Assembly	RES01-4E1R00	10K RES.M.FILM 5% 0.4W	15	R114,R127,R144,R145,R146,R147, R148,R149,R150,R151,R8,R56,R57 ,R65,R91
)N8000-02	Main Board Assembly	RES01-4E1R10	11K RES.M.FILM 5% 0.4W	1	R83
)N8000-02	Main Board Assembly	RES01-4E1R50	15K RES.M.FILM 5% 0.4W	1	R152
)N8000-02	Main Board Assembly	RES01-4E2R20	22K RES.M.FILM 5% 0.4W	1	R18
)N8000-02	Main Board Assembly	RES01-4E2R70	27K RES.M.FILM 5% 0.4W	1	R154
)N8000-02	Main Board Assembly	RES01-5E1R00	100K RES.M.FILM 5% 0.4W	13	R115,R116,R117,R118,R119,R120, R121,R122,R123,R124,R2,R3,R112
)N8000-02	Main Board Assembly	RES01-5E4R70	470K RES.M.FILM 5% 0.4W	1	R156
)N8000-02	Main Board Assembly	RES01-5E8R20	820K RES.M.FILM 5% 0.4W	1	R155
)N8000-02	Main Board Assembly	RES01-7E1R00	10M RES.M.FILM 5% 0.4W	2	R60,R61
)N8000-02	Main Board Assembly	RES02-0E0R00	0 OHM LINK (LARGE)	20	LK8,LK9,LK10,LK11,LK12,LK13, LK17,LK18,LK19,LK20,LK21,LK1,L K2,LK3,LK4,LK5,LK6,LK7 R4,R5
)N8000-02	Main Board Assembly	RES02-3E2R74	2K74 RES M.FILM 1% 0.4W	15	R97,R98,R99,R100,R101,R102,R10 3,R104,R105,R106,R107,R108,R10 9,R110,R111,
)N8000-02	Main Board Assembly	RES02-3E9R53	9K53 RES.M.FILM 1% 0.5W	1	R84
)N8000-02	Main Board Assembly	RES02-4E1R10	11K RES.M.FILM 1% 0.5W	5	R92,R93,R94,R95,R96
)N8000-02	Main Board Assembly	RES22-98C510	8 X 10K 9 PIN SIL	9	RP8,RP9,RP10,RP1,RP3,RP4,RP5, RP6,RP7
)N8000-02	Main Board Assembly	SEM11-1N4002	1N4002 TAPED/REEL	1	D4
)N8000-02	Main Board Assembly	SEM11-1N4148	1N4148 TAPED/REEL	2	D9,D10
)N8000-02	Main Board Assembly	SEM12-ZX55V150	15V ZENER 500MW	1	ZD1
)N8000-02	Main Board Assembly	SEM23-ICL7660	ICL7660 NEG V CONVERTOR	1	IC38,
)N8000-02	Main Board Assembly	SEM31-BC184	BC184/BC384	4	Q7,Q1,Q2,Q3
)N8000-02	Main Board Assembly	SEM31-BC327	BC327 TRANSISTOR T092	4	Q5,Q6,Q13,Q4
)N8000-02	Main Board Assembly	SEM31-BC337	BC337 TRANSISTOR	1	Q14,

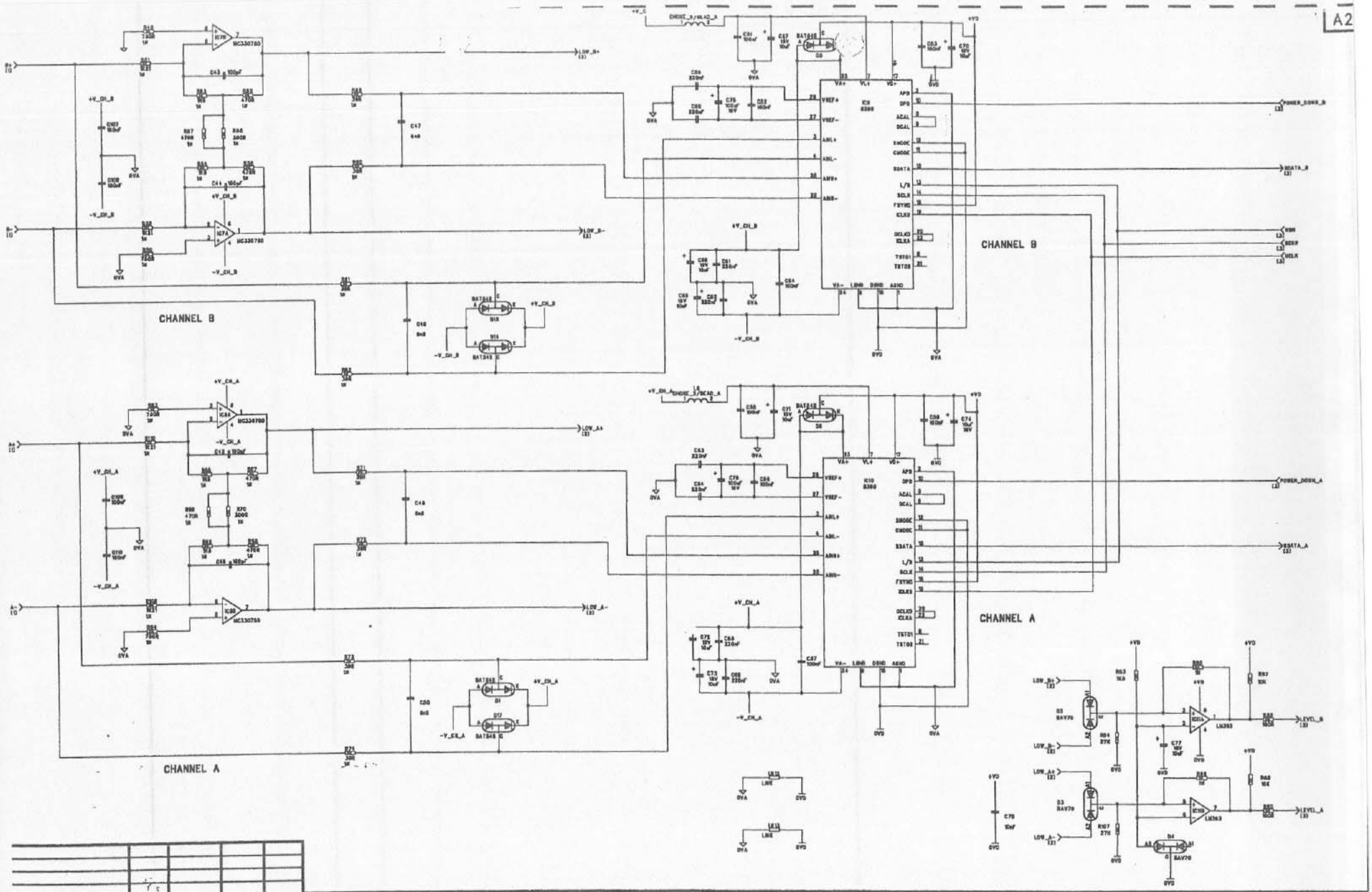
AssemblyPartNumber	Assembly Description	ComponentPartNumber	PartDesc	Quantity	Text
DN8000-02	Main Board Assembly	CAP02-SK547100	47N CERAMIC CAP 0.2"	17	C72,C74,C76,C133,C134,C135, C136,C137,C138, C4,C58,C60,C62,C64,C66,C68,C70
DN8000-02	Main Board Assembly	CAP02-UG310100	100PF CERAMIC CAP 0.2"	5	C113,C114,C115,C116,C117.
DN8000-02	Main Board Assembly	CAP02-UG333100	330PF CERAMIC CAP 0.2"	5	C128,C129,C130,C131,C132
DN8000-02	Main Board Assembly	CAP12-J122100	2N2 POLYSTER CAP 0.2"	5	C118,C119,C120,C121,C122
DN8000-02	Main Board Assembly	CAP12-J156100	5N6 POLYESTER CAP	5	C123,C124,C125,C126,C127
DN8000-02	Main Board Assembly	CAP12-J210100	10N POLYESTER CAP	1	C35
DN8000-02	Main Board Assembly	CAP12-J222100	22N POLYESTER CAP 0.2"	3	C9,C44,C45
DN8000-02	Main Board Assembly	CAP12-J310100	100N POLYESTER CAP 0.2"	1	C39
DN8000-02	Main Board Assembly	CAP12-J322100	220N POLYESTER CAP 0.2"	2	C53,C54
DN8000-02	Main Board Assembly	CAP12-J410100	1U POLYESTER CAP 0.2" 5%	2	C40,C57
DN8000-02	Main Board Assembly	CAP42-210016	10U16V ELEC.RAD.CAP.0.1"	3	C46,C47,C48
DN8000-02	Main Board Assembly	CAP42-247025	47U 25V RAD.ELEC.CAP	1	C8
DN8000-02	Main Board Assembly	CAP42-310016	100U16V ELEC.RAD.CAP0.1"	23	C50,C78,C79,C80,C81,C82,C83, C84,C85,C86,C87,C88,C89,C90, C91,C92,C28,C29,C30,C31,C32, C33,C34
DN8000-02	Main Board Assembly	CAP42-322025	220UF 25V RAD.ELEC.CAP	3	C49,C55,C56
DN8000-02	Main Board Assembly	CON02-03SMVL	3WY 0.156" LKG ML HDR	2	ST25,ST26
DN8000-02	Main Board Assembly	CON12-08MC	0.05" 8WY RIB. CBL.CON	3	ST27,ST15,ST13
DN8000-02	Main Board Assembly	CON12-12MV	12x0.050"PICOFLEX HEADER	2	ST19,ST20
DN8000-02	Main Board Assembly	CON12-14MV	14x0.050"PICOFLEX HEADER	1	ST21
DN8000-02	Main Board Assembly	CON12-16MV	16x0.050"PICOFLEX HEADER	1	ST22
DN8000-02	Main Board Assembly	CON12-26MV	26x0.050"PICOFLEX HEADER	1	ST45
DN8000-02	Main Board Assembly	CON31-3FBHI	NC3 FBH1 XLR	1	ST1
DN8000-02	Main Board Assembly	CON31-3MBH3L1	NC3 MBH3L1 XLR	6	ST2,ST3,ST4,ST5,ST6,ST7
DN8000-02	Main Board Assembly	CON52-08P310	8 PIN DIL IC SOCKET	2	IC2S,IC13S
DN8000-02	Main Board Assembly	CON52-32P610	32 PIN DIL IC SOCKET	2	IC18S,IC19S,
DN8000-02	Main Board Assembly	CON55-44DIL	PLCC SOCKET 44 PIN	1	IC1S
DN8000-02	Main Board Assembly	E5-R2204	RELAY 2P2W 12V DN728 OPT	5	RL1,RL2,RL3,RL4,RL5
DN8000-02	Main Board Assembly	MWK-GENM01-3	XLR SHEILDING BRACKET	3	FIT TO ST4 & ST5,ST6 & ST7,ST1 & ST2
DN8000-02	Main Board Assembly	MWX-GENM03-1	XLR SHIELD BRKT (SINGLE)	1	FIT TO ST3
DN8000-02	Main Board Assembly	RES01-1E8R20	82R RES. MFILM 5% 0.4W	2	R113,R129
DN8000-02	Main Board Assembly	RES01-2E1R00	100R RES. M FILM 5% 0.4W	1	R85
DN8000-02	Main Board Assembly	RES01-2E1R20	120R RES. MFILM 5% 0.4W	1	R1,


ADC3P01-ASB
10/9/97
Component Side Legend
ADC3P01-A
3/9/97
Main Board
ADC3P02-A
Sub-Board
Transformer
Option

Mains Switch Board
WARNING !!!
MAINS VOLTAGE
Front Panel Board
Front Panel Pot & Switch Board
Interface Board
KLARK TEKNIK PLC
DYNAMIC FRONT PANEL & BREAK-OFFS
800006 ISSUE 4 14/8/97
LEGEND COMPONENT SIDE

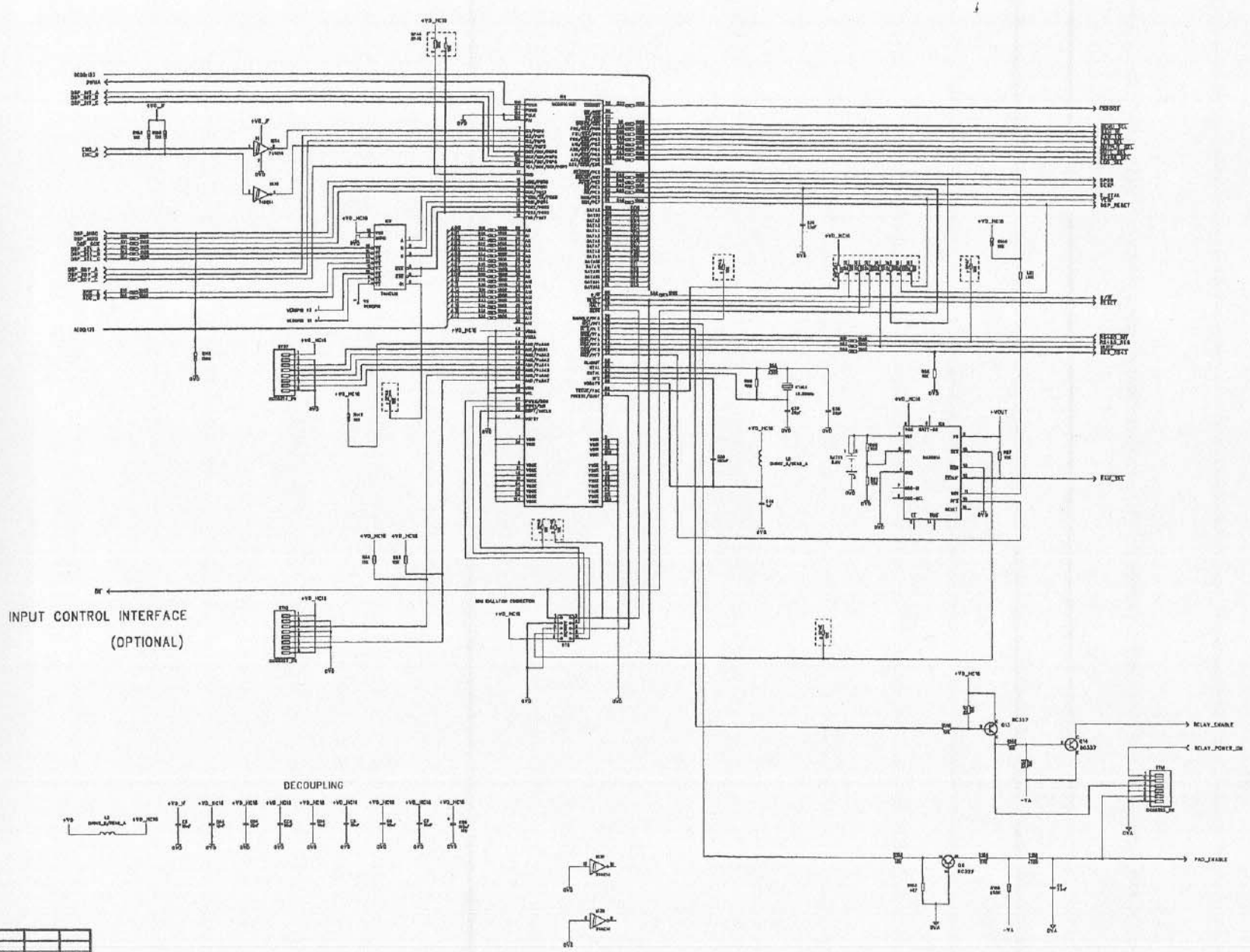


					UNIT: DN8000		KLARK TEKNIK PLC.	
					TITLE: 20-BIT ENHANCED ADC BOARD	DRAWN: A.D.W.	DATE: 19/05/97	SHEET: 3 of 3
IMENTS	ISS.	INT.	DATE.	RFC.	BOARD No. ADC_20	BOARD Iss. 2.0	CHECKED:	SHEET Iss: 2.0	DRG No. ADC_20

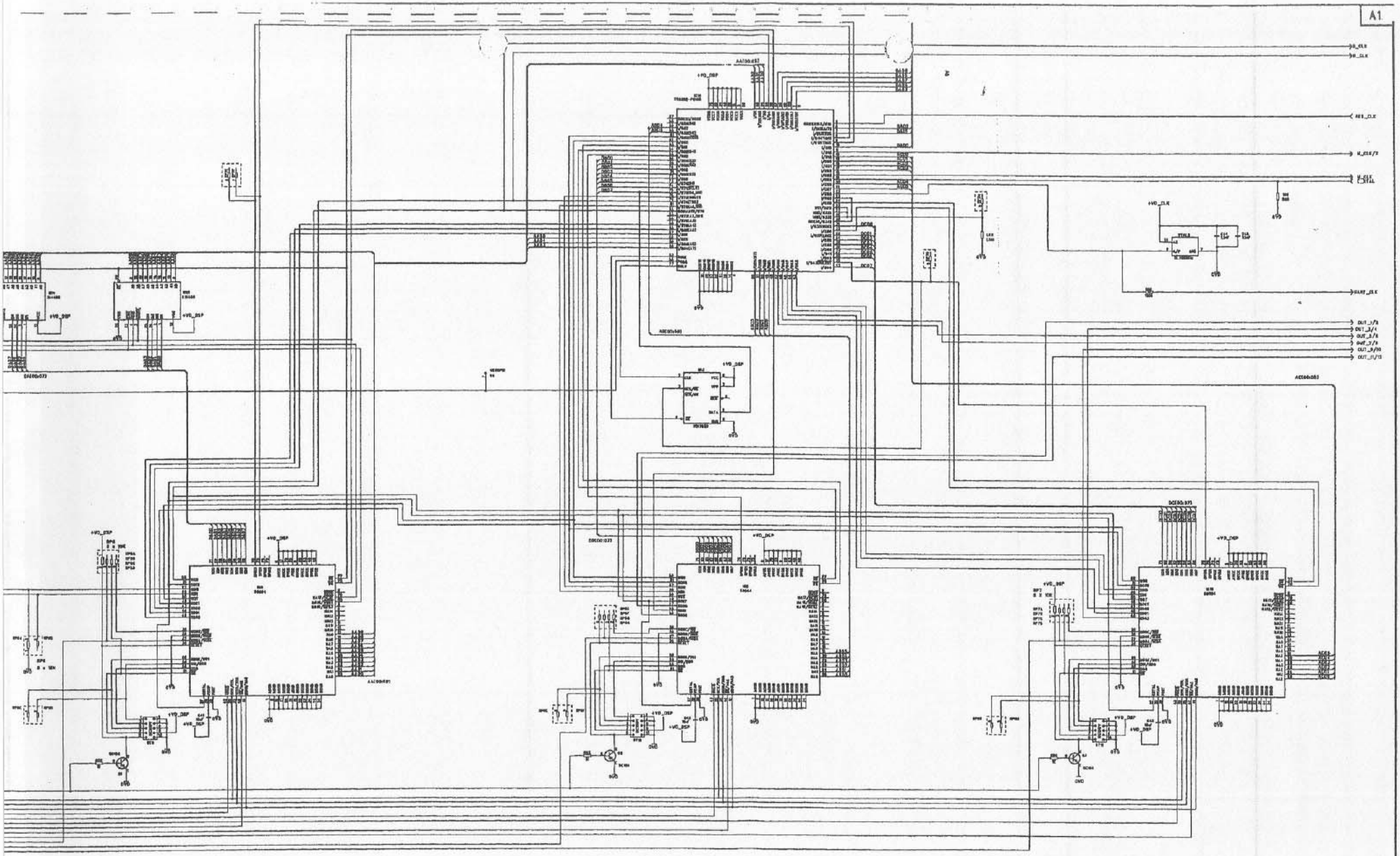


UNIT: DN8000			KLARK TEKNIK PLC.	
TITLE: 20-BIT ENHANCED ADC BOARD		DRAWN: A.D.W.	DATE: 19/05/97	SHEET: 2 of 3
BOARD No. ADC_20	BOARD Iss. 2.0	CHECKED:	SHEET Iss: 2.0	DRG No. ADC_20

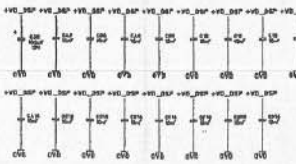
ISS.	INIT.	DATE.	REC.



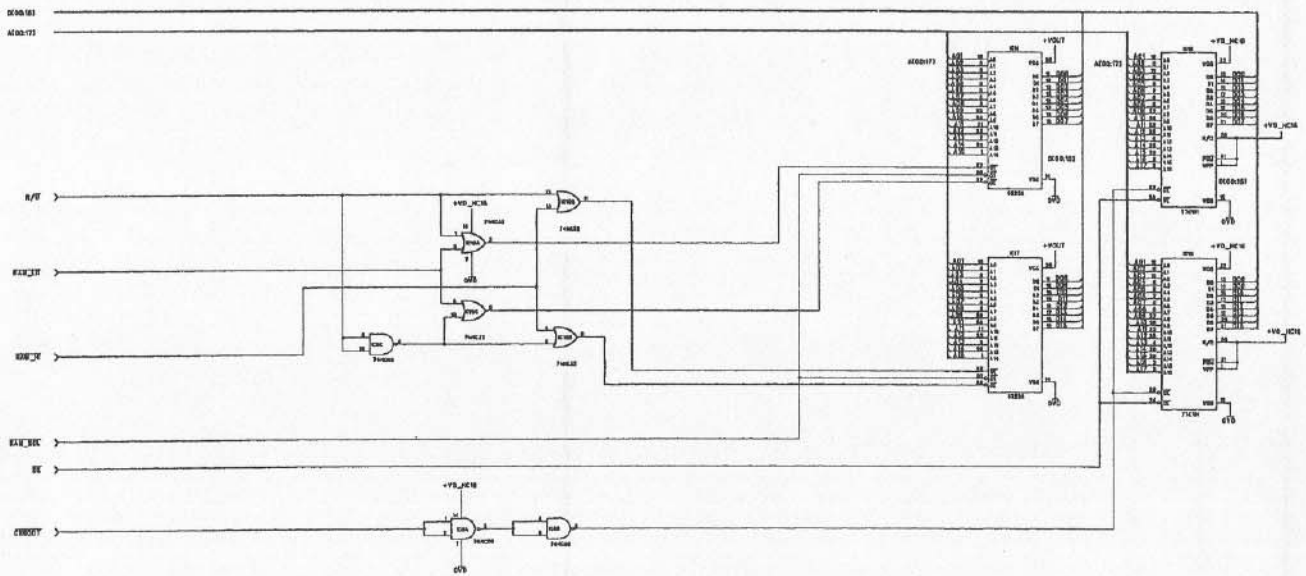
UNIT: DN8000			KLARK TEKNIK PLC.		
TITLE: 68HC16 HOST PROCESSOR CIRCUIT		DRAWN: A.D.W.	DATE: 27/05/97	SHEET: 2 of 8	
BOARD No. 8000b	BOARD Iss. 3	CHECKED:	SHEET Iss: 3	DRG No. 8000b3	



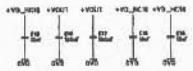
DECOUPLING



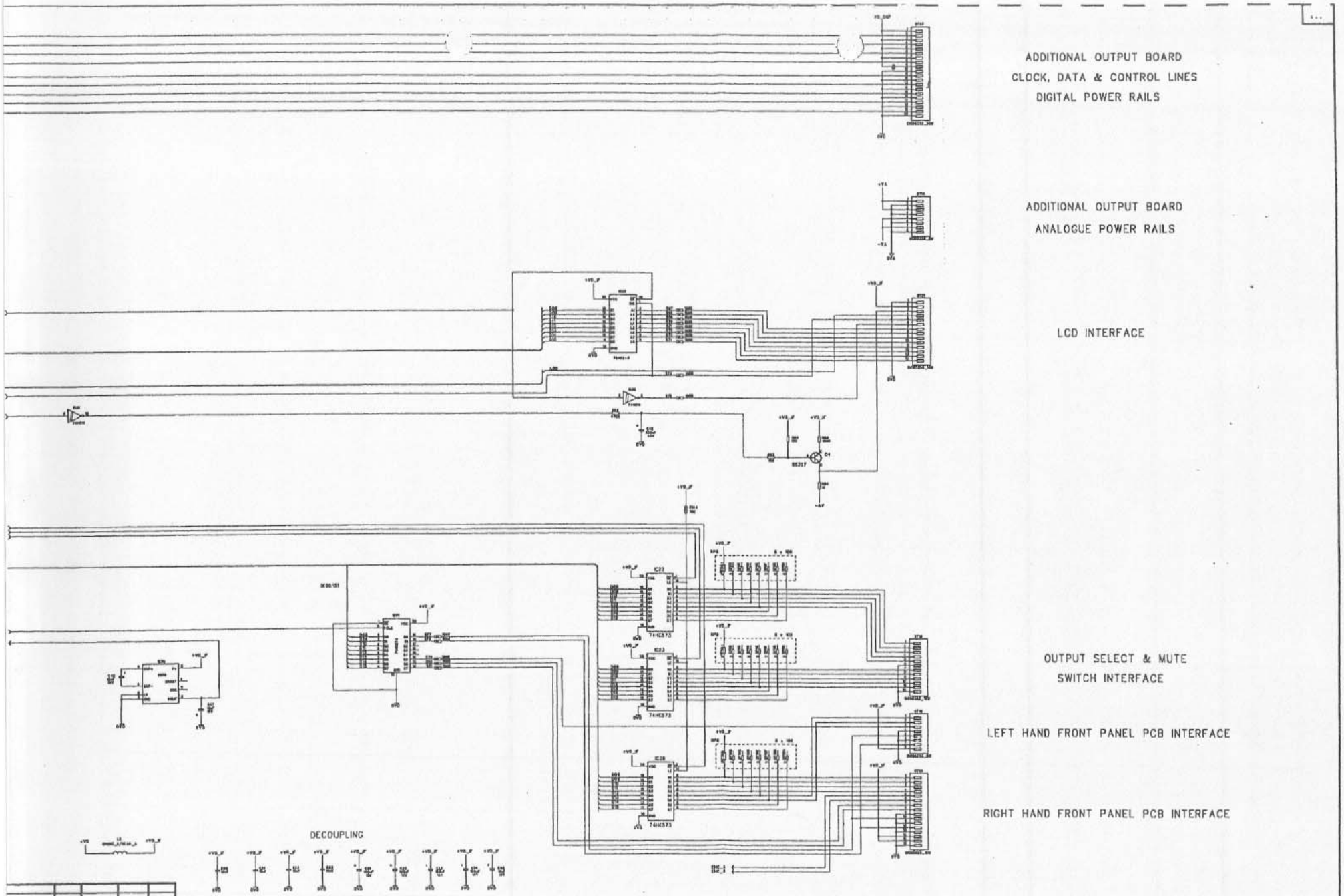
UNIT: DN8000			KLARK TEKNIK PLC.		
TITLE: DSP CIRCUIT		DRAWN: A.D.W.	DATE: 27/05/97	SHEET: 3 of 8	
BOARD No. 8000b	BOARD Iss. 3	CHECKED:	SHEET Iss: 3	DRG No. 8000b3	



DECOUPLING

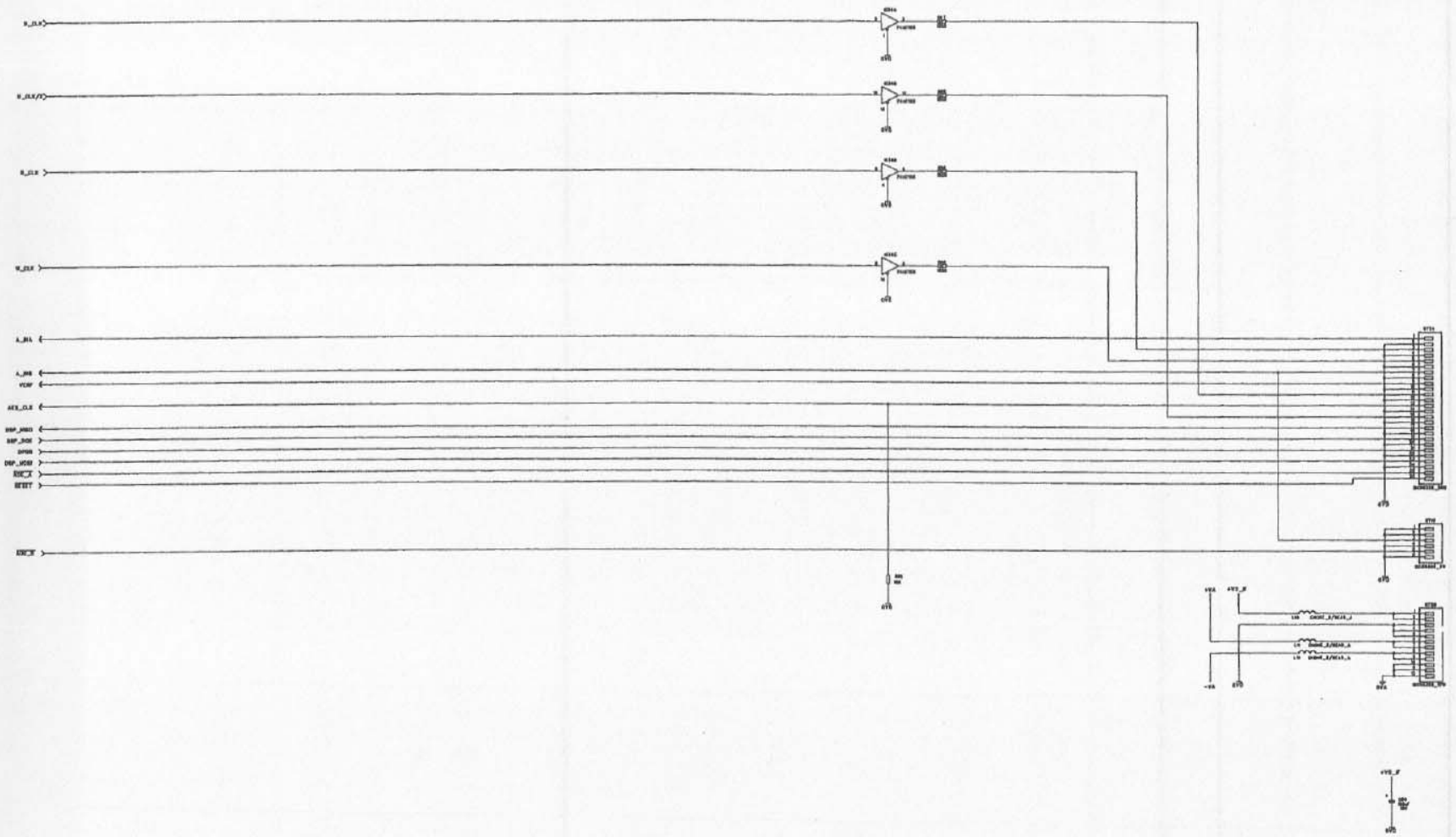


UNIT: DN8000			KLARK TEKNIK PLC.		
TITLE: RAM & EPROM MEMORY CIRCUIT		DRAWN: A.D.W.	DATE: 27/05/97	SHEET: 4 of 8	
BOARD No. 8000b	BOARD Iss. 3	CHECKED:	SHEET Iss: 3	DRG No. 8000b3	



UNIT: ON8000			KLARK TEKNIK PLC.		
TITLE: INTERFACE CIRCUITS		DRAWN: A.D.W.	DATE: 27/05/97	SHEET: 5 of 8	
BOARD No. 8000b	BOARD Iss. 3	CHECKED:	SHEET Iss: 3	DRG No. 8000b3	

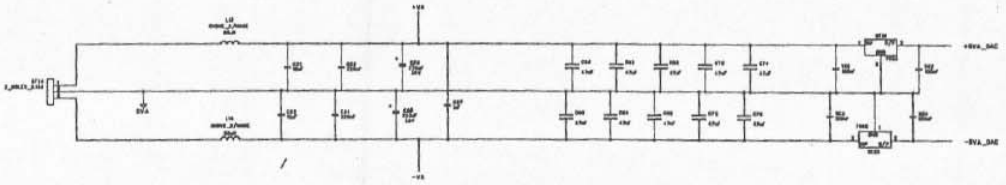
A1



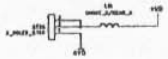
ECOUPLING

UNIT: DN8000			KLARK TEKNIK PLC.		
TITLE: MERLIN SUB-BOARD INTERFACE		DRAWN: A.D.W.	DATE: 27/05/97	SHEET: 6 of 8	
BOARD No. 8000b	BOARD Iss. 3	CHECKED:	SHEET Iss: 3	DRG No. 8000b3	

ANALOGUE POWER SUPPLY

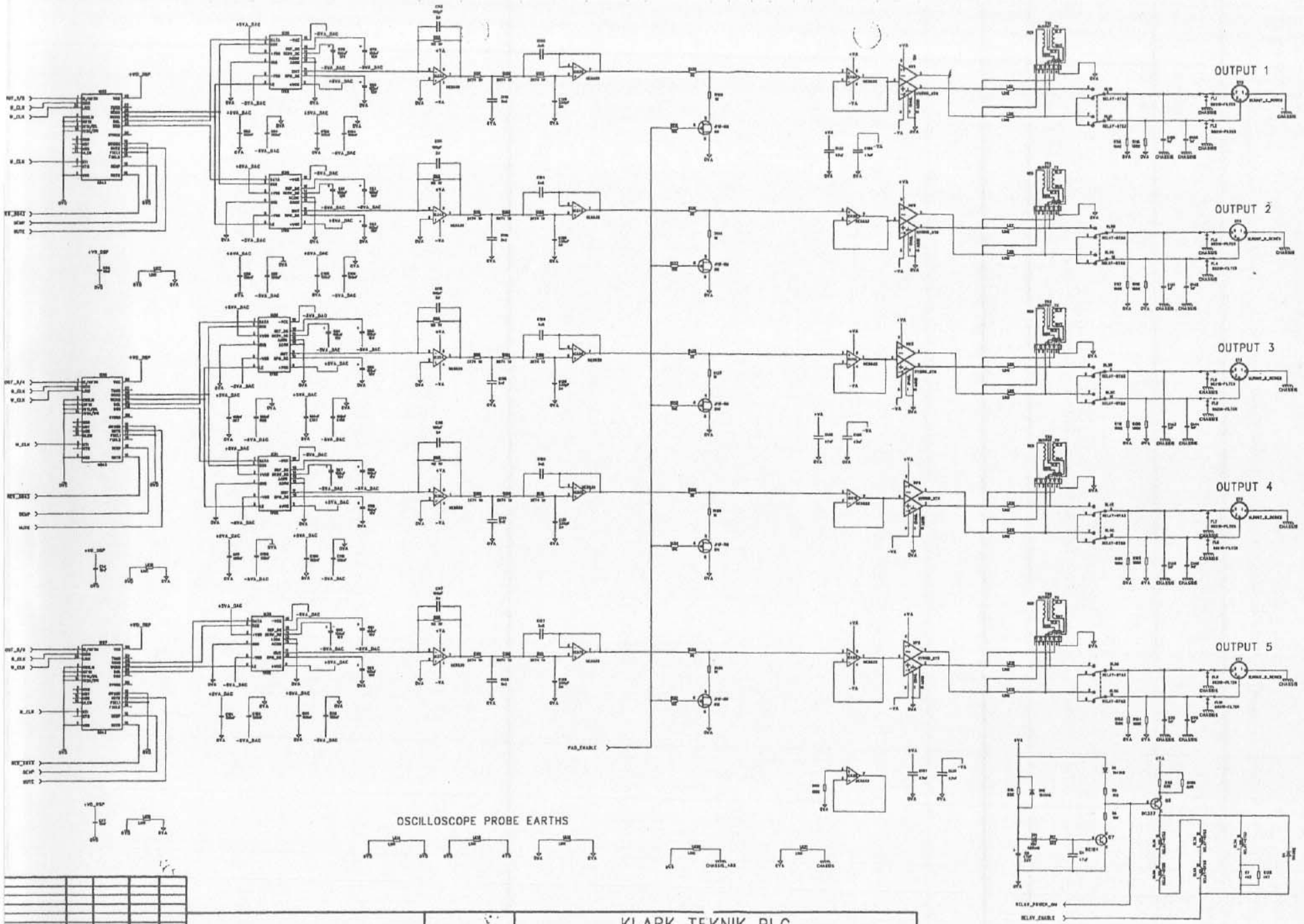


DIGITAL POWER SUPPLY

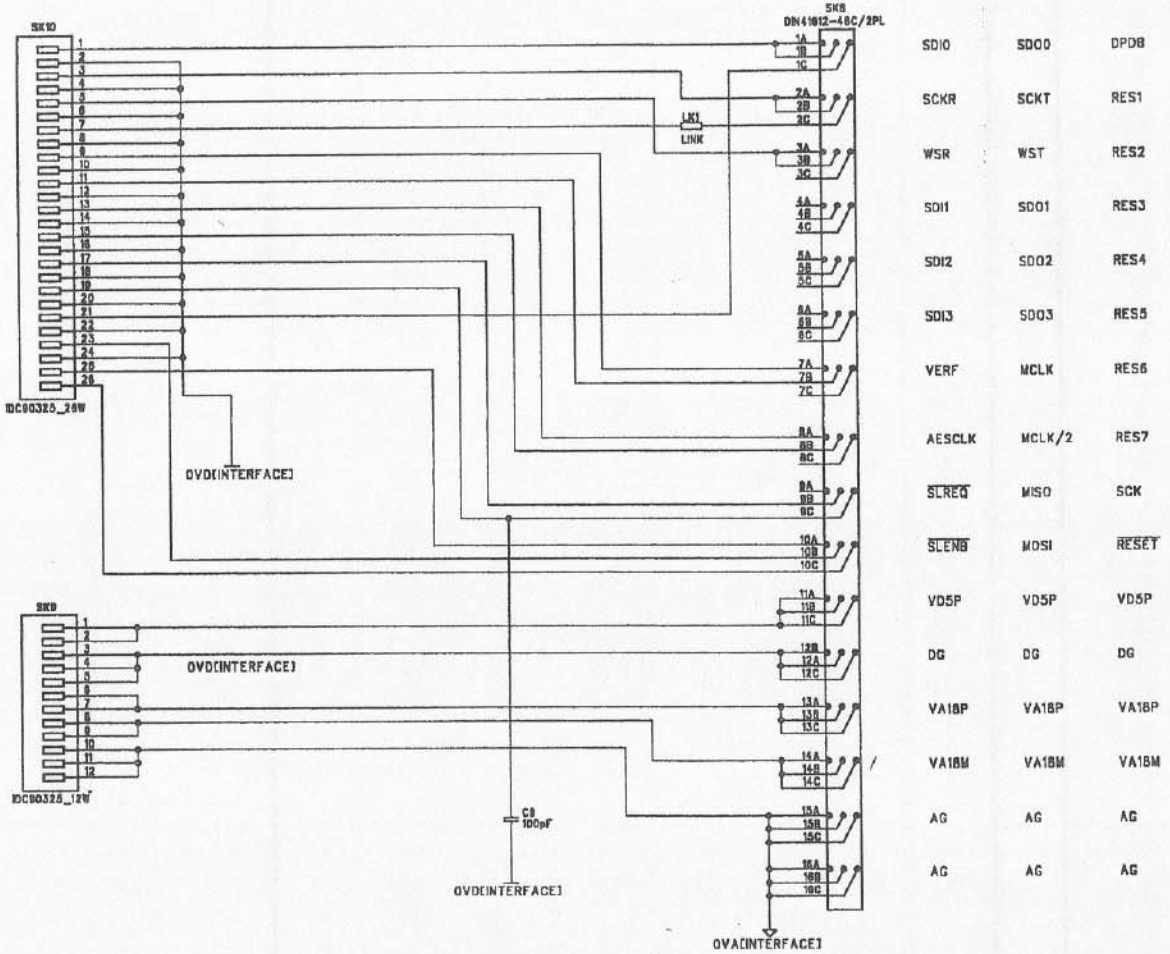


UNIT: DN8000			KLARK TEKNIK PLC.		
TITLE: POWER SUPPLIES		DRAWN: A.D.W.	DATE: 27/05/97	SHEET: 7 of 8	
BOARD No. 8000b	BOARD Iss. 3	CHECKED:	SHEET Iss: 3	DRG No. 8000b3	

A1

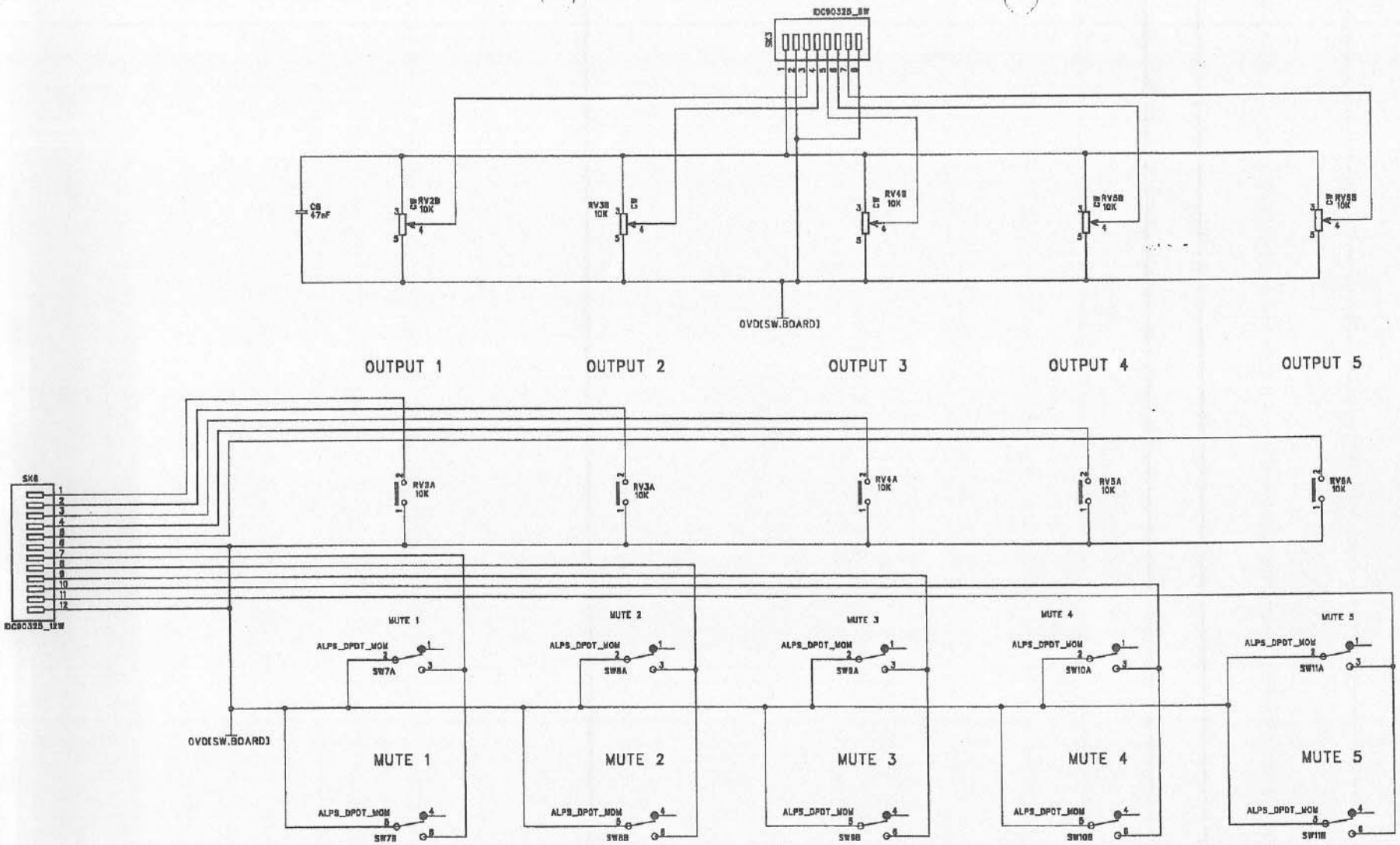


	UNIT: ON8000			KLARK TEKNIK PLC.		
	TITLE: OUTPUT CHANNELS 1-5		DRAWN: A.D.W.	DATE: 27/05/97	SHEET: 8 of 8	
	BOARD No. 8000b	BOARD Iss. 3	CHECKED:	SHEET Iss: 3	DRG No. 8000b3	

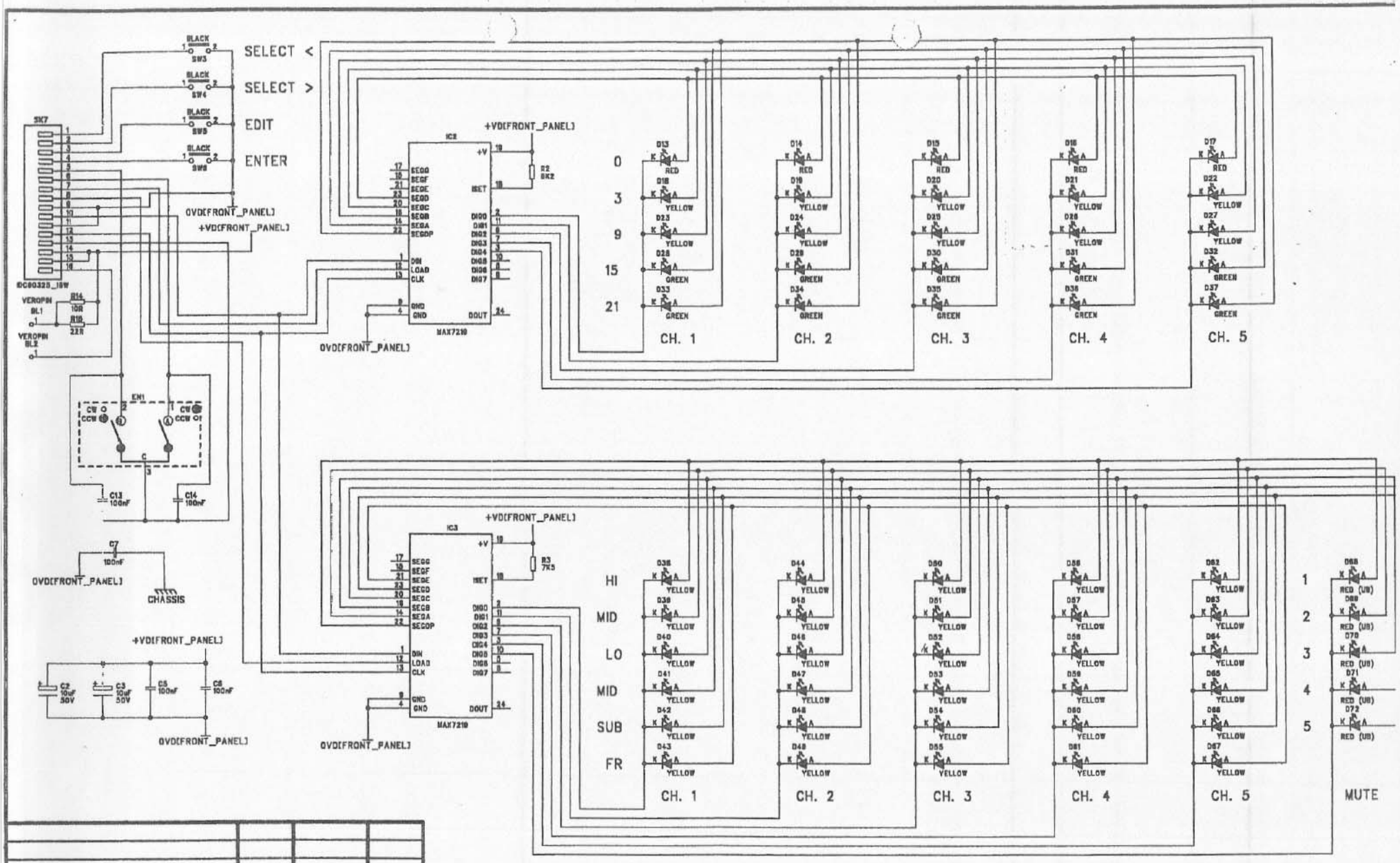


ge to allow AES PLL Status Line	4	A.D.W.	14/08/97
MENDMENTS	ISS.	INIT.	DATE.

UNIT: DN8000	KLARK TEKNIK		
TITLE: DN8000 Interface board	DRAWN: ADW.	DATE: 14/08/97	SHEET: 4 OF 4
BOARD No. 8000A BOARD Iss. 4	CHECKED:	SHEET Iss: 4	DRG No. 8000A 4

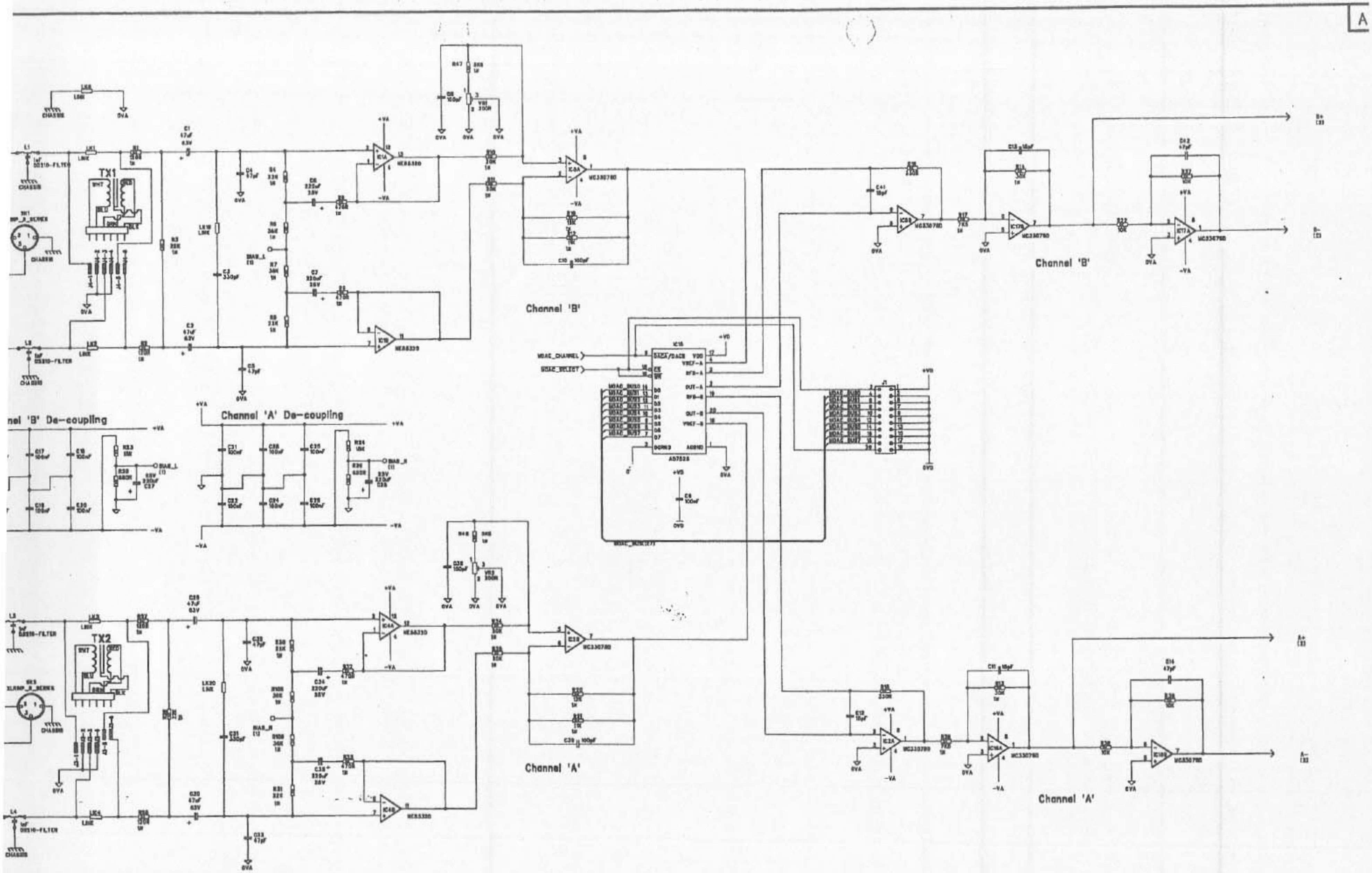


UNIT: DN8000	KLARK TEKNIK		
TITLE: DN8000 FRONT PANEL CIRCUITS	DRAWN: ADW.	DATE: 14/08/97	SHEET: 3 OF 4
BOARD No. 8000A BOARD Iss. 4	CHECKED	SHEET Iss. 4	DRG. No. 8000A-7



Correction to encoder connections	3	A.D.W.	21/05/97
AMMENDMENTS	ISS.	INIT.	DATE.

UNIT: 8N8000	KLARK TEKNIK		
TITLE: FRONT PANEL – RIGHT BOARD	DRAWN: A.D.W.	DATE: 14/08/97	SHEET: 2 OF 4
BOARD No. 8000A BOARD Iss. 4	CHECKED:	SHEET Iss: 4	DRG No. 8000A_2



UNIT: DN8000		KLARK TEKNIK PLC.	
TITLE: 20-BIT ENHANCED ADC BOARD	DRAWN: A.D.W.	DATE: 19/05/97	SHEET: 1 of 3
BOARD No. ADC_20 / BOARD Iss. 2.0	CHECKED:	SHEET Iss: 2.0	DRG No. ADC_20

ISS.	INIT.	DATE.	RFC.