Bench power up or stand alone without exchange connection.
Power supply
Batt -50 V to pin 32/42
Earth + to pin 2/12
Link Pin 2/12 to 1/11

Power may now be applied.

E.P.G. Programming

At switch on, the EPG might need to be reset before any attempt is made to input data. The display should show six zero's, with the first zero flashing, if not reset as follows.
  This hard reset is accomplished by shorting the reset pins together. These pins are situated at the bottom of the board, under and slightly to the left of the 5MHz oscillator (teleswitch). Short the pins with a screwdriver or pliers. Once the EPG has been reset the display will show six zero's, with the first zero flashing.

Proceed by entering the following data:-

Function	Key Operation	Display. ( ) indicate flashing digit					
Enter yesterdays date in YY/MM/DD format. (e.g. 12 01 21 = 2012 Jan 21st)		?	?	?	?	?	?
Ready EPG for time input	DOA	(0)	0	0	0	0	0
Enter any time	Typically 161616	1	6	1	6	1	6
Cancel alarms	C						

If the alarms do not cancel, Key D7 and any alarms present will be shown on the display as follows:

Error Number	Fault
2	Pulse Supply 2 (ORD) fail
4	Pulse Supply 3 (CCB) fail
8	Pulse Supply 4 (CRAM) fail
16	Pulse Supply 5 (CRAM) fail
32	Pulse Supply 6 (CRAM) fail

If more than one pulse supply has failed the alarm error number will be cumulative.

Error Number	Fault
40	Too Slow
41	PROM1 Error
42	PROM2 Error
43	RAM Error
44	Hardware Error
88	Alarm Check

The EPG checks the pulse outputs by converting them to exchange voltage levels and comparing them to the rates in force. Failure of the supply 01 is critical and may mean a replacement is required.

Having cleared any alarms, clear the display by keying C and input the following data:-

Function	Key Operation	Display. ( ) indicates flashing digit					
Enter EDIT mode	E151						
	D2A	(8)	1	1	1	0	0
Enter yesterdays date	YYMMDD	?	?	?	?	?	?
Amend all tariff pulse rates. Supply 02	D42A	0			(2)	1	6
Cheap – 30 seconds	120	0			1	2	0
	4A	1			(0)	9	6
Standard – 30 seconds	120	1			1	2	0
	4A	2			(0)	9	6
Peak – 30 seconds	120	2			1	2	0
	4A	3			(0)	9	6
Economy – 30 seconds	120	3			1	2	0
Amend all tariff pulse rates. Supply 03	D43A	0			(2)	1	6
Cheap – 30 seconds	120	0			1	2	0
	4A	1			(0)	9	6
Standard – 30 seconds	120	1			1	2	0
	4A	2			(0)	9	6
Peak – 30 seconds	120	2			1	2	0
	4A	3			(0)	9	6
Economy – 30 seconds	120	3			1	2	0
Clear display	C						
End editing	F	?	?	?	?	?	?
Prepare for time entry	DOA	?	?	?	?	?	?
Enter new time of 23:58:58	235858	2	3	5	8	5	8
Allow EPG to step 1 minute past midnight (this is a wait and do nothing)	This sets a flag in software which isn't obvious						
Check for todays date	D8	?	?	?	?	?	?
Prepare for time entry	DOA	?	?	?	?	?	?
Enter actual time. Sync last digit to reference clock eg TIM or Atomic		?	?	?	?	?	?
Time Visible & running	D0	?	?	?	?	?	?

The question marks (?) indicate either the time the EPG is running, the date or the checksum. These will be unique to each site.

Connections.

     Designation
SCA1 Earth (link to SCA2 or 12 if stand alone)
SCA2 Exch. Earth (link to SCA1 or 11 if stand alone)
SCA4 24 HR
SCA6 CRAM output
SCA8 CRAM output
SCA10 1 SEC Sinks 40 mA @ -50v
SCA42   Neg 50V
SCA44   Midnight line
SCA26   Alarm
SCA48   CCB Pulse (PreSet for 30 Sec output) Sinks 40 mA @ -50v
SCA50   Ord Pulse   (PreSet for 30 Sec output) Sinks 40 mA @ -50v

CRAM outputs coded SCA8 = PEAK, SCA6 = STANDARD, SCA 6+8 = CHEAP.

Checking the functionality.

With a volt meter on the >100 volt scale, connect the positive voltmeter lead to pin 10 and the negative lead to pin 42.
Pulses peaking at 20 Volts should be visible at 1 sec intervals.
Move the positive volt meter lead to pin 50
A standing voltage of 25 volts should be seen and a pulse to 40 Volts seen every 30 seconds.
Move the positive volt meter lead to pin 48
A standing voltage of 25 volts should be seen and a pulse to 40 Volts seen every 30 seconds.
Test complete.