

Date/Time : 05 Jul 2013, 01:06 pm
Agency : ATSI
Tested By : Mike
Location : Athens

MONITOR INFORMATION

Manufacturer : Reno
Model : MMU-1600G
Type : 16 Channel
Serial Number : 123456
Device ID : ATSI Shop Unit

TESTER INFORMATION

Model : PCMT-8000
Serial Number : 8000-ENGL
Firmware Version : 0
Software : PCMT-8000 Test Manager v1.0

USER NOTES

Shop Test

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault

INTERLOCK SENSING TEST

PCMT-8000 Output: 0V on Interlock Pin A
Monitor Response: 0V on Interlock Pin B
PCMT-8000 Output: 24V on Interlock Pin A
Monitor Response: 24V on Interlock Pin B
Test Result : Pass

POWER FAILURE IGNORE TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: AC power removed
PCMT-8000 Output: Delay 433ms
PCMT-8000 Output: AC power restored
PCMT-8000 Output: Delay 2000ms
Monitor Response: No Fault
Test Result : Pass

POWER FAILURE DETECT TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: AC power removed
PCMT-8000 Output: Delay (interrupt time)
PCMT-8000 Output: AC power restored
PCMT-8000 Output: Delay 525ms - (interrupt time)
PCMT-8000 Output: Increase (interrupt time)
PCMT-8000 Output: Repeat until fault detected
Monitor Response: Fault (interrupt time) = 459ms
Test Result : Pass

INITIAL FLASH TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
Monitor Response: AC power removed
Monitor Response: Delay 6000ms
Monitor Response: AC power restored
Monitor Response: Delay for minimum flash time

Monitor Response: No Fault after 7 sec
Test Result : Pass

START DELAY TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: AC power removed
PCMT-8000 Output: Delay 5500ms
Monitor Response: STDLY Relay Open = Closed
Monitor Response: STDLY Relay Closed = Open
PCMT-8000 Output: AC power is restored
Monitor Response: STDLY Relay Open = Open after 1788ms
Monitor Response: STDLY Relay Closed = Closed after 1788ms
Test Result : Pass

DC1 FAILURE IGNORE TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: DC1 voltage removed
PCMT-8000 Output: Delay 100ms
PCMT-8000 Output: DC1 voltage restored
Monitor Response: No Fault
Test Result : Pass

DC1 FAILURE DETECT TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: DC1 voltage removed
PCMT-8000 Output: Delay (off time)
PCMT-8000 Output: DC1 voltage restored
PCMT-8000 Output: Delay 300ms
PCMT-8000 Output: Increase (off time)
PCMT-8000 Output: Repeat until fault detected
Monitor Response: Fault (off time) = 145ms
Test Result : Pass

DC2 FAILURE IGNORE TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: DC2 voltage removed
PCMT-8000 Output: Delay 100ms
PCMT-8000 Output: DC2 voltage restored
Monitor Response: No Fault
Test Result : Pass

DC2 FAILURE DETECT TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: DC2 voltage removed
PCMT-8000 Output: Delay (off time)
PCMT-8000 Output: DC2 voltage restored
PCMT-8000 Output: Delay 300ms
PCMT-8000 Output: Increase (off time)
PCMT-8000 Output: Repeat until fault detected
Monitor Response: Fault (off time) = 146ms
Test Result : Pass

DC MONITOR INHIBIT TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault

PCMT-8000 Output: VMINH input is on
PCMT-8000 Output: Delay 2000ms
PCMT-8000 Output: DC1 is off, DC2 is off
PCMT-8000 Output: Delay 2000ms
Monitor Response: No Fault
Test Result : Pass

CVM FAILURE IGNORE TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: CVM input is off
PCMT-8000 Output: Delay 100ms
PCMT-8000 Output: CVM input is on
PCMT-8000 Output: Delay 2000ms
Monitor Response: No Fault
Test Result : Pass

CVM FAILURE DETECT TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: CVM input is off
PCMT-8000 Output: Delay (off time)
PCMT-8000 Output: CVM input is on
PCMT-8000 Output: Delay 300ms
PCMT-8000 Output: Increase (off time)
PCMT-8000 Output: Repeat until fault detected
Monitor Response: Fault (off time) = 146ms
Test Result : Pass

CONFLICT IGNORE TIMING TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: G1 and G2 on
PCMT-8000 Output: Delay 183ms
PCMT-8000 Output: G1 and G2 off
PCMT-8000 Output: Delay 500ms
Monitor Response: No Fault
Test Result : Pass

CONFLICT DETECT TIMING TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: G1 on, G2 on
PCMT-8000 Output: Delay (conflict time)
PCMT-8000 Output: G1 off, G2 off
PCMT-8000 Output: Delay 300ms
PCMT-8000 Output: Increase (conflict time)
PCMT-8000 Output: Repeat until fault detected
Monitor Response: Fault (conflict time) = 201ms
Test Result : Pass

CONFLICT LATCHING TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: G1 on, G2 on
PCMT-8000 Output: Delay 1000ms
Monitor Response: Fault
PCMT-8000 Output: G1 off, G2 off
PCMT-8000 Output: Delay 1000ms
Monitor Response: Fault

PCMT-8000 Output: AC power removed
PCMT-8000 Output: Delay 6 sec
PCMT-8000 Output: AC power restored
PCMT-8000 Output: Delay 18 sec
Monitor Response: Fault
Test Result : Pass

REDFAIL IGNORE TIMING TEST
PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: All Reds on
PCMT-8000 Output: Redenable on
PCMT-8000 Output: Delay 1000ms
Monitor Response: No Fault
PCMT-8000 Output: R1 off
PCMT-8000 Output: Delay 683ms
PCMT-8000 Output: R1 on
Monitor Response: No Fault
Test Result : Pass

REDFAIL DETECT TIMING TEST
PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: All Reds on
PCMT-8000 Output: Redenable on
PCMT-8000 Output: Delay 1000ms
Monitor Response: No Fault
PCMT-8000 Output: R1 off
PCMT-8000 Output: Delay (redfail time)
PCMT-8000 Output: All Reds on
PCMT-8000 Output: Delay 300ms
PCMT-8000 Output: Increase (redfail time)
PCMT-8000 Output: Repeat until fault detected
Monitor Response: Fault (redfail time) = 714ms
Test Result : Pass

REDFAIL LATCHING TEST
PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: All Reds on
PCMT-8000 Output: Redenable on
PCMT-8000 Output: Delay 1000ms
Monitor Response: No Fault
PCMT-8000 Output: R1 off
PCMT-8000 Output: Delay 1000ms
Monitor Response: Fault
PCMT-8000 Output: AC power removed
PCMT-8000 Output: Delay 6 sec
PCMT-8000 Output: AC power restored
PCMT-8000 Output: Delay 18 sec
Monitor Response: Fault
Test Result : Pass

REDENABLE 89VRMS TEST
PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: All Reds on
PCMT-8000 Output: Redenable at 90Vrms
PCMT-8000 Output: Delay 1000ms
PCMT-8000 Output: Reset monitor

Monitor Response: No Fault
PCMT-8000 Output: Delay 1000ms
PCMT-8000 Output: R1 off
PCMT-8000 Output: Delay 1000ms
Monitor Response: Fault
Test Result : Pass

REDENABLE 70VRMS TEST
PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: All Reds off
PCMT-8000 Output: Redenable at 69Vrms
PCMT-8000 Output: Delay 1000ms
PCMT-8000 Output: Reset monitor
Monitor Response: No Fault
PCMT-8000 Output: Delay 2000ms
Monitor Response: No Fault
Test Result : Pass

RED 70VRMS SINE WAVE RECOGNITION TEST
PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: All Reds at AC line
PCMT-8000 Output: R(n) at 71Vrms (Full sinewave)
PCMT-8000 Output: Redenable at AC line
PCMT-8000 Output: Delay 2200ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: No Fault on R1 - R16
Test Result : Pass

RED 70VRMS POSITIVE RECTIFIED RECOGNITION TEST
PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: All Reds at AC line
PCMT-8000 Output: R(n) at 71Vrms (Positive Rectified Half)
PCMT-8000 Output: Redenable at AC line
PCMT-8000 Output: Delay 2200ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: No Fault on R1 - R16
Test Result : Pass

RED 70VRMS NEGATIVE RECTIFIED RECOGNITION TEST
PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: All Reds at AC line
PCMT-8000 Output: R(n) at 71Vrms (Negative Rectified Half)
PCMT-8000 Output: Redenable at AC line
PCMT-8000 Output: Delay 2200ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: No Fault on R1 - R16
Test Result : Pass

RED 50VRMS SINE WAVE RECOGNITION TEST
PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: All Reds at AC line
PCMT-8000 Output: R(n) at 49Vrms (Full sinewave)
PCMT-8000 Output: Redenable at AC line
PCMT-8000 Output: Delay 2200ms
PCMT-8000 Output: Repeat for (n) from 1 through 16

Monitor Response: Fault on R1 - R16
Test Result : Pass

RED 50VRMS POSITIVE RECTIFIED RECOGNITION TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: All Reds at AC line
PCMT-8000 Output: R(n) at 49Vrms (Positive Rectified Half)
PCMT-8000 Output: Redenable at AC line
PCMT-8000 Output: Delay 2200ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: Fault on R1 - R16
Test Result : Pass

RED 50VRMS NEGATIVE RECTIFIED RECOGNITION TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: All Reds at AC line
PCMT-8000 Output: R(n) at 49Vrms (Negative Rectified Half)
PCMT-8000 Output: Redenable at AC line
PCMT-8000 Output: Delay 2200ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: Fault on R1 - R16
Test Result : Pass

GRN 25VRMS SINE WAVE RECOGNITION TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: G(n) at 26Vrms (Full sinewave)
PCMT-8000 Output: G1 (or G2) at AC line
PCMT-8000 Output: Delay 2000ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: Fault on G1 - G16
Test Result : Pass

YEL 25VRMS SINE WAVE RECOGNITION TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: Y(n) at 26Vrms (Full sinewave)
PCMT-8000 Output: G1 (or G2) at AC line
PCMT-8000 Output: Delay 2000ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: Fault on Y1 - Y16
Test Result : Pass

GRN 25VRMS POSITIVE RECTIFIED RECOGNITION TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: G(n) at 26Vrms (Positive Rectified Half)
PCMT-8000 Output: G1 (or G2) at AC line
PCMT-8000 Output: Delay 2000ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: Fault on G1 - G16
Test Result : Pass

YEL 25VRMS POSITIVE RECTIFIED RECOGNITION TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: Y(n) at 26Vrms (Positive Rectified Half)
PCMT-8000 Output: G1 (or G2) at AC line

PCMT-8000 Output: Delay 2000ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: Fault on Y1 - Y16
Test Result : Pass

GRN 25VRMS NEGATIVE RECTIFIED RECOGNITION TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: G(n) at 26Vrms (Negative Rectified Half)
PCMT-8000 Output: G1 (or G2) at AC line
PCMT-8000 Output: Delay 2000ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: Fault on G1 - G16
Test Result : Pass

YEL 25VRMS NEGATIVE RECTIFIED RECOGNITION TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: Y(n) at 26Vrms (Negative Rectified Half)
PCMT-8000 Output: G1 (or G2) at AC line
PCMT-8000 Output: Delay 2000ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: Fault on Y1 - Y16
Test Result : Pass

GRN 15VRMS SINE WAVE RECOGNITION TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: G(n) at 14Vrms (Full sinewave)
PCMT-8000 Output: G1 (or G2) at AC line
PCMT-8000 Output: Delay 2000ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: No Fault on G1 - G16
Test Result : Pass

YEL 15VRMS SINE WAVE RECOGNITION TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: Y(n) at 14Vrms (Full sinewave)
PCMT-8000 Output: G1 (or G2) at AC line
PCMT-8000 Output: Delay 2000ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: No Fault on Y1 - Y16
Test Result : Pass

GRN 15VRMS POSITIVE RECTIFIED RECOGNITION TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: G(n) at 14Vrms (Positive Rectified Half)
PCMT-8000 Output: G1 (or G2) at AC line
PCMT-8000 Output: Delay 2000ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: No Fault on G1 - G16
Test Result : Pass

YEL 15VRMS POSITIVE RECTIFIED RECOGNITION TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: Y(n) at 14Vrms (Positive Rectified Half)
PCMT-8000 Output: G1 (or G2) at AC line

PCMT-8000 Output: Delay 2000ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: No Fault on Y1 - Y16
Test Result : Pass

GRN 15VRMS NEGATIVE RECTIFIED RECOGNITION TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: G(n) at 14Vrms (Negative Rectified Half)
PCMT-8000 Output: G1 (or G2) at AC line
PCMT-8000 Output: Delay 2000ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: No Fault on G1 - G16
Test Result : Pass

YEL 15VRMS NEGATIVE RECTIFIED RECOGNITION TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: Y(n) at 14Vrms (Negative Rectified Half)
PCMT-8000 Output: G1 (or G2) at AC line
PCMT-8000 Output: Delay 2000ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: No Fault on Y1 - Y16
Test Result : Pass

GRN 1500PF TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: G(n) at AC line through 1500pF
PCMT-8000 Output: G1 (or G2) at AC line
PCMT-8000 Output: Delay 750ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: No Fault on G1 - G16
Test Result : Pass

YEL 1500PF TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: G(n) at AC line through 1500pF
PCMT-8000 Output: G1 (or G2) at AC line
PCMT-8000 Output: Delay 750ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: No Fault on G1 - G16
Test Result : Pass

SHORT YEL TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: All Reds on
PCMT-8000 Output: Redenable on
PCMT-8000 Output: R(n) off, G(n) on
PCMT-8000 Output: Delay 2000ms
PCMT-8000 Output: G(n) off, Y(n) on
PCMT-8000 Output: Delay 2000ms
PCMT-8000 Output: Y(n) off, R(n) on
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: Fault on Y1 - Y16
Test Result : Pass

YEL PLUS RED INTERVAL TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: All Reds on
PCMT-8000 Output: Redenable on
PCMT-8000 Output: R(n) off, G(n) on
PCMT-8000 Output: Delay 2000ms
PCMT-8000 Output: G(n) off, Y(n) on
PCMT-8000 Output: Delay 2000ms
PCMT-8000 Output: Y(n) off, R(n) on
PCMT-8000 Output: R(n+1) off, G(n+1) on
PCMT-8000 Output: Delay 2000ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: Fault on CH1 - CH16
Test Result : Pass

RED/GRN/YEL SINGLE CHANNEL TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: R(n) on
PCMT-8000 Output: Delay 750ms
PCMT-8000 Output: R(n) off
PCMT-8000 Output: G(n) on
PCMT-8000 Output: Delay 750ms
PCMT-8000 Output: G(n) off
PCMT-8000 Output: Y(n) on
PCMT-8000 Output: Delay 3600ms
PCMT-8000 Output: Y(n) off
PCMT-8000 Output: R(n) on
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: No Fault on CH1 - CH16
Test Result : Pass

GRN/YEL DUAL DISPLAY TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: All Red at AC line
PCMT-8000 Output: Redenable at AC line
PCMT-8000 Output: R(n) off, G(n) on
PCMT-8000 Output: Delay 2000ms
PCMT-8000 Output: Y(n) on
PCMT-8000 Output: Delay 1250ms
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: Fault on G1Y1 - G16Y16
Test Result : Pass

RED/GRN DUAL DISPLAY TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: All Red at AC line
PCMT-8000 Output: Redenable at AC line
PCMT-8000 Output: G(n) on
PCMT-8000 Output: Delay 1266ms
PCMT-8000 Output: G(n) off
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: Fault on R1G1 - R16G16
Test Result : Pass

YEL/RED DUAL DISPLAY TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault

PCMT-8000 Output: All Red at AC line
PCMT-8000 Output: Redenable at AC line
PCMT-8000 Output: R(n) off, G(n) on
PCMT-8000 Output: Delay 2000ms
PCMT-8000 Output: G(n) off, Y(n) on
PCMT-8000 Output: Delay 4000ms
PCMT-8000 Output: R(n) on
PCMT-8000 Output: Delay 1250ms
PCMT-8000 Output: Y(n) off
PCMT-8000 Output: Repeat for (n) from 1 through 16
Monitor Response: Fault on R1Y1 - R16Y16
Test Result : Pass

AC POWER FAILURE THRESHOLD TEST

PCMT-8000 Output: Quiescent state
Monitor Response: No Fault
PCMT-8000 Output: AC voltage at 105Vrms
PCMT-8000 Output: AC voltage decreasing
Monitor Response: Fault at 94Vrms
PCMT-8000 Output: AC voltage increasing ...
Monitor Response: No Fault at 97Vrms
Monitor Response: Failure/restore hysteresis = 3Vrms
Test Result : Pass

SDLC PORT1 TEST

PCMT-8000 Output: Sending valid SDLC frames
PCMT-8000 Output: PORT 1 enabled
Monitor Response: No Fault
PCMT-8000 Output: Stop frames for 400ms
Monitor Response: Fault
Test Result : Pass

Lap 1 of 1 complete. All tests were passed.