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Physical Characteristics

Weight: 10lbs (4.5 kgs.)
Height: 8 1/4 inches (210 mm)
Width: 8 5/16 inches (211 mm)
Depth: 4 5/16 inches (110 mm)

Installation

1. Locate the area where the Remote Status Alarm Panel (RSAP) will be installed. The monitor should be within 300 feet (91 meters) of the UPS.

2. Mount the monitor to the wall using the four (4) pre-drilled holes in the back. Use appropriate hardware for the installation.

3. Wiring requirements are: Seven (7) twisted pair 16 AWG cable run in metal conduit. Use Belden Catalog No. 1485A(eight (8) twisted pair) or equivalent. All electrical and mechanical connections to be made per local and/or national electric codes.

4. Connect the conduit to the RSAP by punching the appropriately sized hole in a convenient location. Care should be taken not to damage any internal components when drilling the hole for conduit.

5. Refering to Figure 2.0, 3.0, and the corresponding UPS wiring diagram, connect the seven (7) pairs of twisted wire from the RSAP to the customer accessible alarm contact terminal bar in the UPS module. (Refer to the UPS Owner’s Manual for location)

6. Refering to Figure 3.0, install six (6) AA batteries (included). Batteries will provide approximately 8 hours of run time in the event of an AC power failure. Replace these batteries annually for optimum performance.

7. Refering to Figure 1.0, connect the power supply adapter into the corresponding jack located on the bottom left-hand side of the RSAP enclosure. Plug the power supply into a convenient 120V/60Hz wall receptacle. Failure to connect to a suitable wall outlet will drain the RSAP’s internal batteries and/or result in damage to the monitor. (If supplied with the hardwire version, please refer to Figure 3.1 for AC input terminal block layout. Connect L1, Neutral, and Ground with minimum of 18awg wire.)

Caution! The monitor must be installed by a qualified electrician. Installation to be inspected by an Authorized UPS Service Engineer at the time of UPS startup.
**Operating Instructions**

ALARM SILENCE pushbutton is used to silence the alarm. MONITOR RESET pushbutton is used to reset the RSAP’s UPS FAULT alarm. The monitor will alarm again if the alarm condition is still present following the RESET.

Monitor TEST pushbutton is used to check the operation of all LED’s and the audible alarm. All LED’s that are illuminated will go off and all lights that are off will illuminate. Horn will also sound.

INTERNAL MONITOR BATTERY TEST button is used to test the condition of the monitor's battery pack. If the yellow LED does not illuminate, replace the batteries.

Reset the RSAP as follows:

1. On the UPS, note the alarm and it’s fault code. If applicable, contact 24-hour UPS field service at (800) 887-7830.
2. If no alarm code is present, press the monitor reset button.
3. If the monitor’s audible alarm sounds again repeat steps 1 and 2.
4. Contact Mitsubishi service if the alarm cannot be reset after a few attempts.

Refer to Figure 1.0 for the location of the LED’s and pushbuttons described below:

1. **Rectifier / Charger LED.** This green LED is illuminated as long as the UPS’ inverter is operating.
2. **Battery LED.** This yellow LED is illuminated as long as the UPS is in the battery backup mode. The audible alarm will beep intermittently.
3. **Inverter On LED.** The green LED is illuminated as long as the UPS’ inverter is operating.
4. **Output LED.** This green LED is illuminated as long as there is power to the critical load (either by the inverter or bypass).
5. **Load On Bypass LED.** This yellow LED is illuminated as long as the critical load is powered by the bypass.
6. **AC Input LED.** This green LED is illuminated as long as there is AC power supplied to the system.
7. **UPS Fault.** This red LED is illuminated and the audible alarm sounds when a UPS fault has occurred. The RSAP must be reset after the alarm is cleared.
8. **Overload LED.** This red LED is illuminated when a UPS overload has occurred. The audible alarm will also sound.
9. **Input Failure LED.** This red LED is illuminated when an input power failure condition is present. The audible alarm will also sound.
10. **Battery Low Voltage.** This red LED is illuminated as soon as the DC bus voltage approaches its cutoff voltage. The audible alarm will also sound.
11. **Alarm Silence LED.** This LED will illuminate when the ALARM SILENCE pushbutton has been pressed and alarm condition is still present. If alarm condition clears, the ALARM SILENCE LED will automatically reset.
12. **Internal Monitor Battery OK LED.** This yellow LED will illuminate when it's corresponding push button is pressed and the batteries are OK. If this light is dim or does not light, replace all internal batteries.
1. RECTIFIER ON (GREEN LED)  
6. AC INPUT ON (GREEN LED)  
7. UPS FAULT (RED LED)  
8. OVERLOAD (RED LED)  
9. INPUT FAILURE (RED LED)  
10. BATTERY LOW VOLTAGE (RED LED)  
11. ALARM SILENCE (RED LED)  
12. INTERNAL MONITOR BATTERY OK (YELLOW LED)  

INPUT TRANSFORMER  
INPUT CONFIGURATION (SEE OPTIONS)  
FEMALE MIC PLUG  
6' CORD  

OPTIONS: VARIOUS INPUT CONFIGURATIONS ARE AVAILABLE FOR THE UPS REMOTE MONITOR. PLEASE CONSULT THE FACTORY ABOUT YOUR PARTICULAR APPLICATION.
1. RECTIFIER ON (GREEN LED)
2. BATTERIES ON (YELLOW LED)
3. INVERTER ON (GREEN LED)
4. OUTPUT TO CRITICAL LOAD (GREEN LED)
5. LOAD ON BYPASS (YELLOW LED)
6. AC INPUT ON (GREEN LED)
7. UPS FAULT (RED LED)
8. OVERLOAD (RED LED)
9. INPUT FAILURE (RED LED)
10. BATTERY LOW VOLTAGE (RED LED)
11. ALARM SILENCE (RED LED)
12. INTERNAL MONITOR BATTERY OK (YELLOW LED)

FIGURE 1.1
(INTERNAL POWER SUPPLY / HARDWIRE OPTION)
TB1

1 - AC INPUT L1 (OPTION)
2 - AC INPUT L1 (OPTION)
3 - BYPASS (CLOSES WHEN ON BYPASS)
4 - BYPASS COMMON
5 - INVERTER (CLOSES WHEN INVERTER IS RUNNING)
6 - INVERTER COMMON
7 - ON BATTERIES (CLOSES WHEN ON BATTERIES)
8 - BATTERY COMMON
9 - RECTIFIER (CLOSES WHEN RECTIFIER IS RUNNING)
10 - RECTIFIER COMMON
11 - UPS FAILURE (CLOSES ON UPS FAILURE)
12 - UPS COMMON
13 - LOW BATTERY (CLOSES WHEN BATTERIES ARE LOW)
14 - LOW BATTERY COMMON
15 - OVERLOAD (CLOSES WHEN IN OVERLOAD)
16 - OVERLOAD COMMON

TERMINAL BLOCK DESCRIPTION
(LOCATED INSIDE BOX)

FIGURE 2.0
1 - AC LINE INPUT L1
2 - AC NEUTRAL INPUT
3 - GROUND
4 - BYPASS
5 - BYPASS COMMON
6 - INVERTER (CLOSES WHEN INVERTER IS RUNNING)
7 - INVERTER COMMON
8 - ON BATTERIES (CLOSES WHEN ON BATTERIES)
9 - BATTERY COMMON
10 - RECTIFIER (CLOSES WHEN RECTIFIER IS RUNNING)
11 - RECTIFIER COMMON
12 - UPS FAILURE (CLOSES ON UPS FAILURE)
13 - UPS COMMON
14 - LOW BATTERY (CLOSES WHEN BATTERIES ARE LOW)
15 - LOW BATTERY COMMON
16 - OVERLOAD (CLOSES WHEN IN OVERLOAD)
17 - OVERLOAD COMMON

TERMINAL BLOCK DESCRIPTION
(LOCATED INSIDE BOX)

FIGURE 2.1
(INTERNAL POWER SUPPLY / HARDWIRE OPTION)
FIGURE 3.1
(INTERNALLY HARDWIRED POWER SUPPLY OPTION)
External Terminal Strip in UPS

<table>
<thead>
<tr>
<th>Output Overload Selectable Item 5</th>
<th>21</th>
<th>Terminal Strip TB1 in Remote Status Alarm Panel</th>
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</thead>
<tbody>
<tr>
<td>Common</td>
<td>16</td>
<td>15 Output Overload</td>
</tr>
<tr>
<td>Battery Low Selectable Item 6</td>
<td>22</td>
<td>14 Common</td>
</tr>
<tr>
<td>To be programmed by start-up personnel</td>
<td></td>
<td>13 Low Battery</td>
</tr>
<tr>
<td>UPS Failure</td>
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<td>12 Common</td>
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<tr>
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<td>11 UPS Failure</td>
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<tr>
<td>Converter Operation Selectable Item 3</td>
<td>19</td>
<td>10 Common</td>
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<tr>
<td>Battery Operation Selectable Item 4</td>
<td>20</td>
<td>9 Rectifier On</td>
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<tr>
<td>Load on Inverter Selectable Item 2</td>
<td>18</td>
<td>8 Common</td>
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<td>Load on Bypass Selectable Item 1</td>
<td>17</td>
<td>7 On Batteries</td>
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<tr>
<td></td>
<td></td>
<td>5 Load on Inverter</td>
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<td></td>
<td>4 Common</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 Load on Bypass</td>
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</table>

16 awg twisted pair recommended

Note: TB1 terminals 6 and 16 not shown for clarity. Terminals are connected internally.
External Terminal Strip in UPS

<table>
<thead>
<tr>
<th>Terminal Strip TB1 in Remote Status Alarm Panel</th>
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<td>Common 34</td>
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<tr>
<td>Battery Low 33</td>
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<td>Common 30</td>
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<td>UPS Failure 29</td>
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<td>Common 28</td>
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<tr>
<td>Converter Operation 27</td>
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<tr>
<td>Common 26</td>
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<tr>
<td>Battery Operation 25</td>
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<td>Common 22</td>
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<td>Load on Bypass 21</td>
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14 awg shielded wire recommended

Note: TB1 terminals 6 and 16 not shown for clarity. Terminals are connected internally.
External Terminal Strip in UPS

Output Overload Common
Output Overload
Battery Low Common
Battery Low
UPS Failure Common
UPS Failure
Converter Operation Common
Converter Operation
Battery Operation Common
Battery Operation
Load on Inverter Common
Load on Inverter
Load on Bypass Common
Load on Bypass

16 awg twisted pair recommended

Remote Status Alarm Panel (RSAP) Interconnect Diagram

Mitsubishi Electric Automation, Inc.

Date 02-15-00

Remote Status Alarm Panel

Drawn by Tom Kobayashi

Page 1/1

Dwg No. U-23C012
External Terminal Strip
TN1(Output) in UPS

Overload Common 26
Overload 25
Battery Low Voltage Common 22
Battery Low Voltage 21
Total Alarm Common 38
Total Alarm 37
Converter (Rectifier) Operation Common 18
Converter (Rectifier) Operation 17
Battery Operation Common 14
Battery Operation 13
Load on Inverter Common 10
Load on Inverter 9
Load on Bypass Common 6
Load on Bypass 5

Terminal Strip TB1 in Remote Status Alarm Panel

Overload Common 16
Overload 15
Low Battery Common 14
Low Battery 13
UPS (Failure) Common 12
UPS Failure 11
Rectifier Common 10
Rectifier 9
On Batteries Common 8
On Batteries 7
Inverter Common 6
Inverter 5
Bypass Common 4
Bypass 3

14 AWG shielded wire recommended

Mitsubishi Electric Automation, Inc.
Remote Status Alarm Panel (RSAP) Interconnect Diagram
Rev A

Date 8/29/03
Drawn by Carl E. Luecht
DWG No. U-23D019

Page 1/1
External Signal Terminal
Block TN1 in UPS

Output Overload Common 22
Output Overload 21
Battery Low Common 20
Battery Low 19
Total Alarm Common 12
Total Alarm 11
Converter Operation Common 18
Converter Operation 17
Battery Operation Common
Battery Operation
Load on Inverter Common 14
Load on Inverter 13
Load on Bypass Common 16
Load on Bypass 15

Terminal Strip TB1 in Remote Status Alarm Panel

Output Overload Common 16
Output Overload 15
Low Battery Common 14
Low Battery 13
UPS Failure Common 12
UPS Failure 11
Rectifier On Common 10
Rectifier On 9
On Batteries Common 8
On Batteries 7
Load on Inverter Common 6
Load on Inverter 5
Load on Bypass Common 4
Load on Bypass 3

14 awg shielded wire recommended
## External Terminal Strip in UPS

<table>
<thead>
<tr>
<th>Output Overload</th>
<th>Common</th>
<th>Battery Low</th>
<th>Common</th>
<th>UPS Failure</th>
<th>Common</th>
<th>Converter Operation</th>
<th>Common</th>
<th>Battery Operation</th>
<th>Load on Inverter</th>
<th>Common</th>
<th>Load on Bypass</th>
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<tbody>
<tr>
<td>35</td>
<td>34</td>
<td>33</td>
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### Terminal Strip TB1 in Remote Status Alarm Panel

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<th>Load on Inverter</th>
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<tr>
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<td>7</td>
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<td>4</td>
<td>3</td>
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### Note

- TB1 terminals 6 and 16 not shown for clarity. Terminals are connected internally.

- 14 awg shielded wire recommended.

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**Remote Status Alarm Panel (RSAP) Interconnect Diagram**

- Mitsubishi Electric Automation, Inc.
- Drawn by Mario Recine
- Dwg No. U-97017
- Date 10-21-97
- Remote Status Alarm Panel (RSAP) Interconnect Diagram
- Page 9700

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14 awg shielded wire recommended

Remote Status Alarm Panel (RSAP) Interconnect Diagram

Mitsubishi Electric
Automation, Inc.

Date: 07-09-99
Dwg No.: U-98015

Drawn by: Mario Recine

Page: 1/1
External Signal Terminal Block TN2 in UPS

14 awg shielded wire recommended

Terminal Strip TB1 in Remote Status Alarm Panel

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Remote Status Alarm Panel (RSAP) Interconnect Diagram

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<td>M. Meinert</td>
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MITSUBISHI ELECTRIC POWER PRODUCTS, INC.
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<tr>
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