Trouble Call (Pit Signal) System

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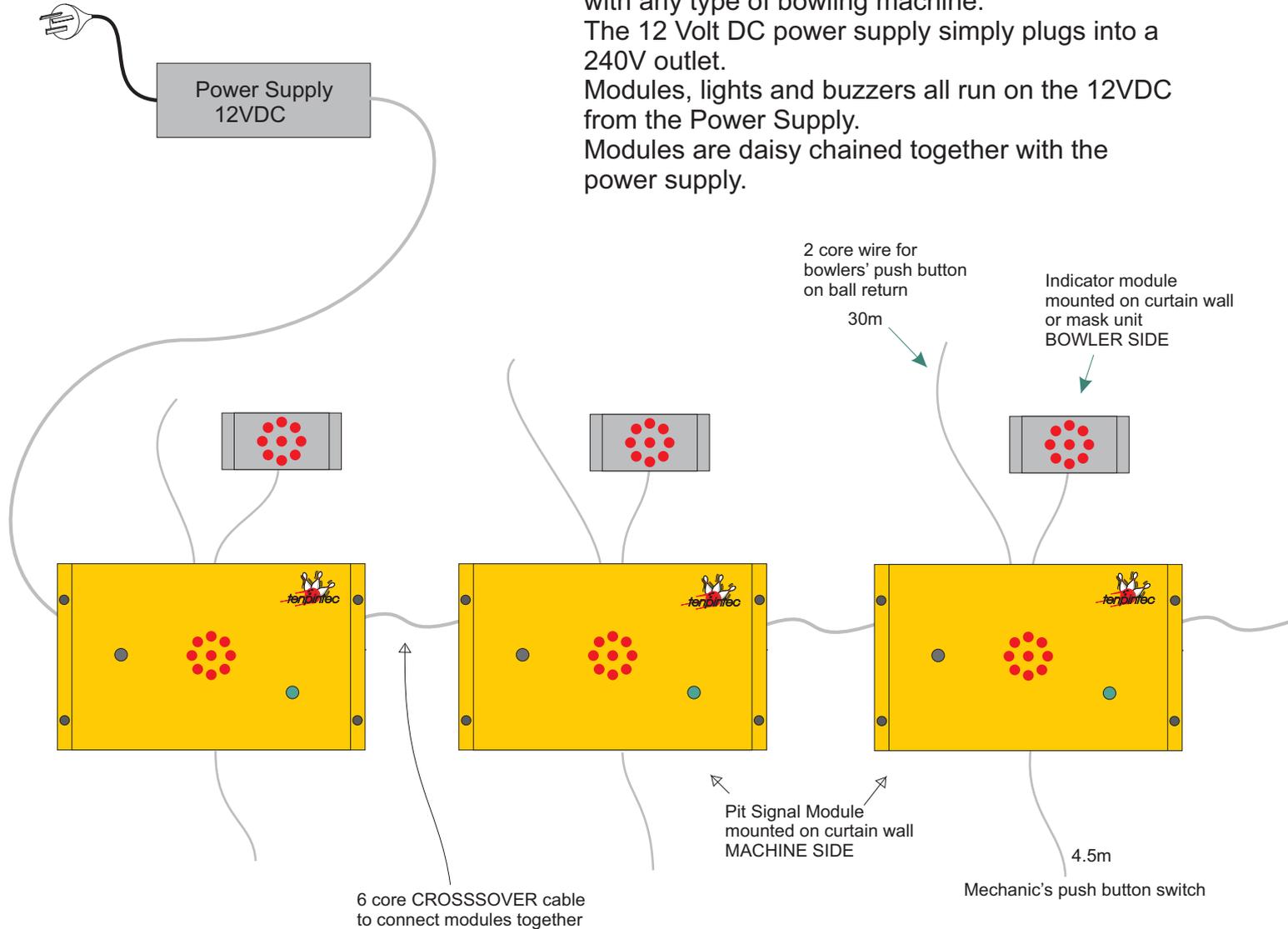
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This modular pit signal system is suitable for use with any type of bowling machine.
The 12 Volt DC power supply simply plugs into a 240V outlet.
Modules, lights and buzzers all run on the 12VDC from the Power Supply.
Modules are daisy chained together with the power supply.

Power Supply
12VDC

2 core wire for bowlers' push button on ball return

30m

Indicator module mounted on curtain wall or mask unit BOWLER SIDE

Pit Signal Module mounted on curtain wall MACHINE SIDE

4.5m

Mechanic's push button switch

6 core CROSSSOVER cable to connect modules together

Operation example:

Bowler on lane 3 presses trouble call button on ball return.

LED indicator on mask unit lights on lane 3 and 4
- signaling to bowlers on both lanes to stop bowling

LED indicator on trouble call module flashes on curtain wall behind lane 3 and 4

All buzzers sound for approx 3 seconds

Technician is guided to correct machine by flashing LED indicator on module mounted on curtain wall

When machine stop is cleared, technician presses mechanics button on machine - LED on mask turns off, indicating to bowler to resume bowling
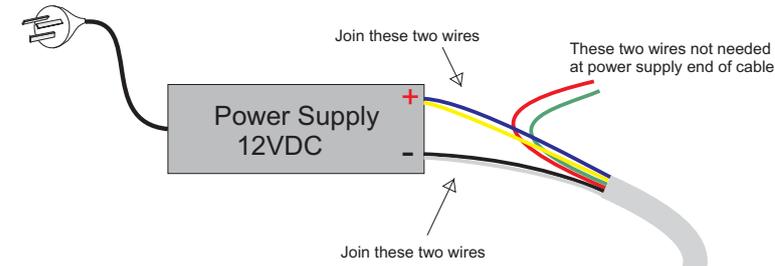
Mechanic's switch - rear of Pinspotter/Pinsetter

Alternate action switch -
   if trouble call is already activated, one push will turn it off
   if trouble call is not already activated, one push will activate (short ring 1 second)
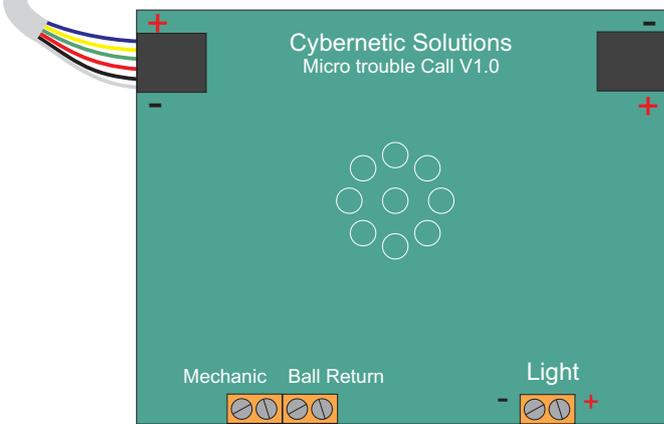
Bowler's Push Button

When bowler pushes trouble call button, indicator lights will activate and buzzer will ring once only (approx 3 seconds)
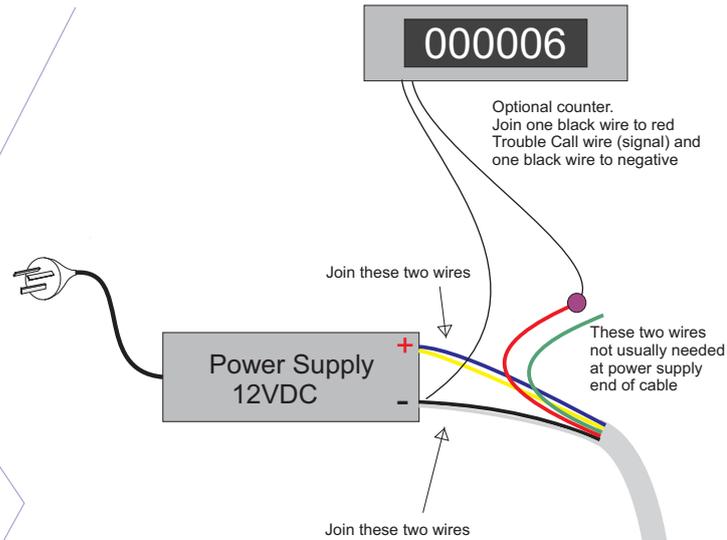Continued pressing of the bowlers' button will not cause the buzzer to sound again.

by Cybernetic Solutions

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Join these two wires

These two wires not needed at power supply end of cable

Power Supply 12VDC

+

−

Join these two wires

Power supply must be connected to either the first or last module of a series

Power Supply located at the Lane 1 end

000006

Optional counter.
Join one black wire to red Trouble Call wire (signal) and one black wire to negative

Join these two wires

Power Supply 12VDC

+

−

These two wires not usually needed at power supply end of cable

Join these two wires

+   −

Cybernetic Solutions
Micro trouble Call V1.0

−   +

Mechanic   Ball Return   Light
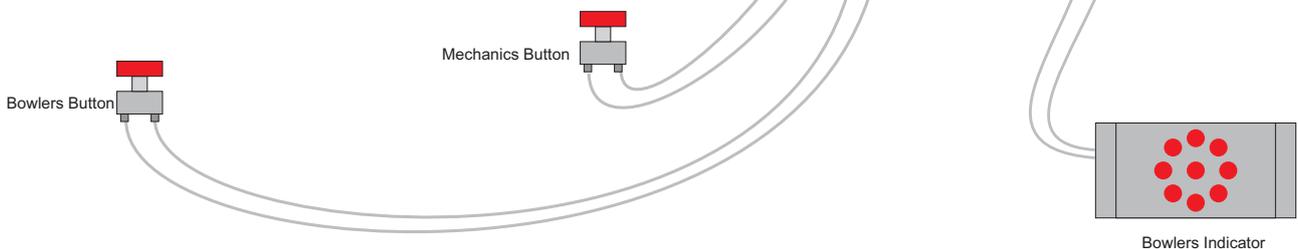   −   +

OR

Power Supply located at the end opposite from Lane 1 (eg Lane 24)

NOTE:
It is very important when connecting the power supply to ensure that POSITIVE and NEGATIVE are around the right way.

The LEFT side of the circuit board has POSITIVE at the TOP of the connector
The RIGHT side of the circuit board has POSITIVE at the BOTTOM of the connector

Also note that the front view of the circuit board is seen from the back of the steel housing of the module

+   −

Cybernetic Solutions
Micro trouble Call V1.0

−   +

Mechanic   Ball Return   Light
                                −   +

Mechanics Button

Bowlers Button

Bowlers Indicator

by Cybernetic Solutions

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Trouble Call (Pit Signal) System

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Connection of a remote Pit Signal/Trouble Call control at the front desk

CONTROL BOX at FRONT DESK

Switch at Control Desk

UP = On
Enables bowler's push button
on ball return

CENTRE = Off
Disables bowler's push button

DOWN = Momentary On
Allows staff to activate
trouble call directly

ON
OFF
MOM

Bowler's push buttons

Lane
7/8

Lane
5/6

Lane
3/4

Lane
1/2

Power Supply
12VDC

Trouble Call Modules
mounted on machine side of curtain wall

Mechanic's push button switches