HPA Series AC Test Set Controllers

C3/P Option - C3 Controls with PLC interface
C4 Option - C3 Controls with 4.5 digit meters
C5 Option - Touch Screen programmable and PC interfaced

C3/P controller is the C3 controller that also offers input and output control provisions to interface with a remote programmable logic controller (PLC) or some other customer supplied controller. It can be operated in the Local mode using the front panel controls or in the Remote mode via customer supplied external controls.

Local Controls – front panel
Same as C3 controller but with OUTPUT MODE switch to engage remote control operation.

Remote Controls – inputs/outputs
Input Control terminals and Output Feedback signals are provided, permitting the remote control of the unit for most functions and output signals to communicate with the external controller. When in the REMOTE mode, all front panel controls are disengaged except for the Emergency Off and Volt and Current meters.

Input Remote Control Signals
Contact N/O: Close HV ON - Open HV OFF
Rate of Rise: 0-10V = 10s – 100s to full output
Contact N/O: RAISE – Close to operate
Contact N/O: LOWER – Close to operate
Contact N/C: Overload Reset – Open to operate
Overload Set Point: 0-10Vdc = 10 - 110% current

Output Feedback Signals
Remote Enabled: N/O
Main Power ON & High Voltage ON: N/O
Overload FAULT: N/O
Voltage: 0-10Vdc = 0 - 100% output voltage
Current: 0-10Vdc = 0 - 100% output current
Voltage return to 0 (automatic after overload): N/O

C4 Controls – C3 but with digital meters upgraded from standard 3.5 digits to 4.5
The C4 controller is the same as the C3 controller but offers 4.5 digit meters rather than the 3.5 digits found on the standard C3 controller. The 4.5 digit meters instead of 3.5 digits offer a higher resolution in reading the voltage and current displayed. The description of the C3 controller can be found on the rear of the HPA Series brochure.

C5 Controls – PLC programmed and controlled (see separate C5 data sheet)
The C5 controller uses a front panel mounted touch screen to permit full programming of the test sets operation. It supplies output signals (voltage, current, and time) to a remote computer for data logging and report generation.

- C1, C2, & C3 controls are described in the HPA Series Brochure -
- Complete C5 controls can be found on its own specification sheet -