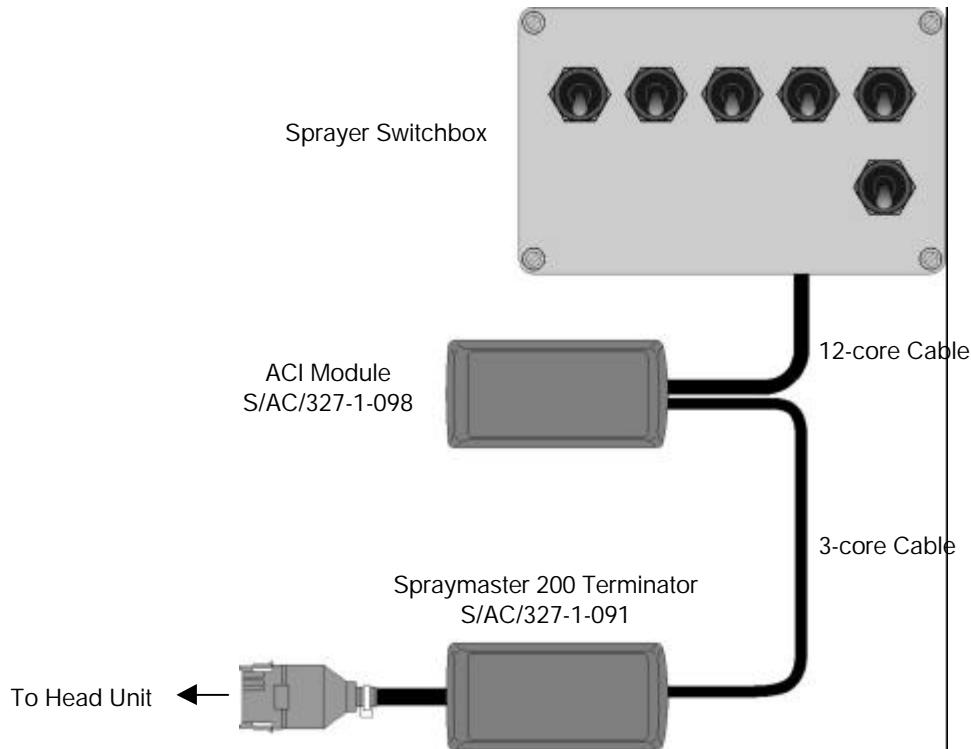




The RDS Serial Interface Assembly or "ACI" (Area Compensation Interface) as it is otherwise known, detects the on/off status of each boom section of a multi-section sprayer. It transmits this information to the serial input (IP 3) of the Spraymaster head unit via the Terminator.

The head unit can therefore, automatically calculate the working width and application rate to ensure accurate monitoring and control when using partial implement width.



The ACI is supplied as a single assembly with two cables attached. The 12-core (10-way) cable connects to the sprayer switchbox, and the 3-core cable connects to the Spraymaster Terminator as follows,

12-core Cable	Function	Connect to:
Red	Boom section 1 recognition	Section 1 (+V when switched on)
Pink	Boom section 2 recognition	Section 2 (+V when switched on)
White	Boom section 3 recognition	Section 3 (+V when switched on)
Grey	Boom section 4 recognition	Section 4 (+V when switched on)
Violet	Boom section 5 recognition	Section 5 (+V when switched on)
Tan	Boom section 6 recognition	Section 6 (+V when switched on)
Green	Boom section 7 recognition	Section 7 (+V when switched on)
Yellow	Boom section 8 recognition	Section 8 (+V when switched on)
Orange	Boom section 9 recognition	Section 9 (+V when switched on)
Black	Master Cutout signal (OFF = 0V)	Master Cutout Switch (see over)
Brown	+V	+V feed to electro-pneumatic switches
3-core Cable	Function	Connection
Blue	0V	Terminator - "SERIAL ACI 0V" (Terminal 3)
Brown	+V	Terminator - "ACI +V" (Terminal 10)
Yellow/Green	Serial Data	Terminator - "SERIAL ACI INPUT" (Terminal 4)



Electrically controlled sprayers

Route the 12-core cable into the sprayer switchbox and cut to length. Any unused boom recognition wires can be cut back to the outer sheath. They do not need to be insulated as they remain at 0V.

NOTE: Make sure the unused brown wire (+V) is insulated.

Each boom recognition wire must be connected so that it has +V when the boom section is switched on. A suitable connection is normally possible by either,

- soldering
- using a piggyback connector (not supplied) onto the back of the switch
- using a 'Snaplock' connector (not supplied)

Pneumatically controlled sprayers

An electro-pneumatic switch is required on each boom section air line. A suitable switch is RDS Pt No. CUT/OUT/KIT/004. Connect the brown (+V) wire to the COMMON terminal of each switch. If the air line is pressurised to spray, the appropriate boom recognition wire is connected to the normally open ('NO') terminal of the switch.

Master On-Off Switch

If switching the master cutout switch OFF removes the 12V supply to the boom section switches, then no further wiring is necessary. When all the boom recognition wires are at 0V, the instrument recognizes the sprayer is switched off and stops accumulating area.

* If the black wire is not used. It does not need to be insulated as it remains at 0V.

If switching the master cutout switch OFF, opens a solenoid valve to divert the flow back to tank and the boom section valves remain open, then connect the black wire to a point on the master on-off switch circuit so that it has +V when the sprayer is switched ON.

When the sprayer is switched OFF, the black wire is grounded to 0V through the solenoid coil.