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CSIRO DIVISION OF RADIOPHYSICS

THE AUSTRALIA TELESCOPE

AT/25.1.1/044

Data Set Types and Options

Dick Ferris 26-Feb-87

Data Sets come in three flavours, primarily representing different numbers of analog channels fitted. One option provides communications with the controller via 50Ohm coaxial cable.

Types

The different types are known by their module system designations D1, D2 and D3. Type D3 provides the full set of analog and digital functions, D2 omits the single ended analog inputs and some of the single bit control and monitor points, while D1 is as for D2 but without any analog inputs. The available control and monitor points are defined in Tables 1 and 2. Table 3 indicates the required connectors.

Table 1. Control Points

Function	Base	Index Range		
		D1	D2	D3
Single Bit Digital Out	64	0..9	0..9	0..31
Addressed 8 Bit Out	96	0..63	0..63	0..63
Addressed 16 Bit Out	160	0..63	0..63	0..63
Decoded Addr. 8 Bit Out	224	0..3	0..3	0..3
Decoded Addr. 16 Bit Out	228	0..3	0..3	0..3
Internal Register Write	232	0..23	0..23	0..23

Table 2. Monitor Points

Function	Base	Index Range		
		D1	D2	D3
Balanced Analog In	0	n.a.	0..7	0..7
Unbalanced Analog In	8	n.a.	n.a.	0..55
Single Bit Digital In	64	0..9	0..9	0..31
Addressed 8 Bit In	96	0..63	0..63	0..63
Addressed 16 Bit In	160	0..63	0..63	0..63
Decoded Addr. 8 Bit In	224	0..3	0..3	0..3
Decoded Addr. 16 Bit In	228	0..3	0..3	0..3
Internal Register Read	232	0..23	0..23	0..23
Multiplexed Analog In	256	n.a.	0..63	0..63

Table 3. Connectors

	D1	D2	D3
J1	*	*	*
J3	.	.	*
K1	.	.	*
K3	*	*	*

Options

Option 01: Under great duress (or for a generous consideration) connectors J2 and K2 may be fitted to provide serial communications with the controller on 50Ohm coax. as an alternative to the normal RS-422 balanced line. The signal MODESEL on J1 selects the desired mode of operation.

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