

The descriptions of the bits of the RC memory word (32+6 bits) of the Heating TX (DDS)-radar controller

Bit N:o	Signal	Direction	Description	Destination
	LPRPint	Not programmable		
61	Spare			
60	Spare			
59	Spare			
58	Spare			
57	Spare			
56	Spare			
31	TXSYNC			test output
30	RFC2	O, logic "1"	TX3/4 ON	SOUSY switch
29	RFC3	O, logic "1"	TX5/6 ON	SOUSY switch
28	RFC4	O, logic "1"	TX7/8 ON	SOUSY switch
27	RFC5	O, logic "1"	TX9/10 ON	SOUSY switch
26	RFC6	O, logic "1"	TX11/12 ON	SOUSY switch
25	FLP1	O, pos active	Phase flip 180 TX1/3	SOUSY switch
24	FLP2	O, pos active	Phase flip 180 TX2/4	SOUSY switch
23	FLP3	O, pos active	Phase flip 180 TX5/7	SOUSY switch
22	FLP4	O, pos active	Phase flip 180 TX6/8	SOUSY switch
21	FLP5	O, pos active	Phase flip 180 TX9/11	SOUSY switch
20	FLP6	O, pos active	Phase flip 180 TX10/12	SOUSY switch
19	TRSW	O, pos active ?		SOUSY switch
18	RFC1	O, logic "1"	TX1/2 ON	SOUSY switch
17	RXP1B	O, ?	Receiver protector bit B	RX-protector B
16	RXP1A	O, ?	Receiver protector bit A	RX-protector A
15	PS1	Output	Profile select bit 1 (common to all AD9953s)	DDS carriers
14	PS0	Output	Profile select bit 0 (common to all AD9953s)	DDS carriers
13	STMC7	O, neg. pulse	Start pulse for the modulation counters of the DDS13&14	DDS carrier 7
12	STMC6	O, neg. pulse	Start pulse for the modulation counters of the DDS11&12	DDS carrier 6
11	STMC5	O, neg. pulse	Start pulse for the modulation counters of the DDS9&10	DDS carrier 5
10	STMC4	O, neg. pulse	Start pulse for the modulation counters of the DDS7&8	DDS carrier 4
9	STMC3	O, neg. pulse	Start pulse for the modulation counters of the DDS5&6	DDS carrier 3
8	STMC2	O, neg. pulse	Start pulse for the modulation counters of the DDS3&4	DDS carrier 2
7	STMC1	O, neg. pulse	Start pulse for the modulation counters of the DDS1&2	DDS carrier 1
6	UPD7	O, pos. pulse	I/O-update command to AD9953s of the DDS13&14	DDS carrier 7
5	UPD6	O, pos. pulse	I/O-update command to AD9953s of the DDS11&12	DDS carrier 6
4	UPD5	O, pos. pulse/I/O-update command to AD9953s of the DDS9&10		DDS carrier 5
3	UPD4	O, pos. pulse/I/O-update command to AD9953s of the DDS7&8		DDS carrier 4
2	UPD3	O, pos. pulse/I/O-update command to AD9953s of the DDS5&6		DDS carrier 3
1	UPD2	O, pos. pulse/I/O-update command to AD9953s of the DDS3&4		DDS carrier 2
0	UPD1	O, pos. pulse/I/O-update command to AD9953s of the DDS1&2		DDS carrier 1
	PatchClk *)	O, pos. pulse	Strobes the RC register, on DDS boards	
	LPRPint		Last Pulse Repetition Period interrupt from R/C HW	
	PatchClk		Timing Clock, from R/C HW	
	Running		R/C running, from R/C HW	

1) Pins are defined in the RC pin assignment document (rows P2 a1-a32 and P2 c1- c32).

*) Separate signal from the RC.

O =output

29.5.2008/mjp