

RPC Acquisition Setup

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Purpose

This note describes how to setup EddyVision to acquire RPC data using the OMNI-200.

Setup Screens

In the main screen, use **Edit | Screens** to enable RPC:

Tester Config

Setup tester config (3-coil shown):

OMNI-200 1 - RPC GUN.cfg

File Edit View Probe Tools Util

TEST LINK TESTER ON EXPLAIN BALANCE REF NULL HW NULL

ABORT POWER DOWN IP Address 192.16.125

Config Options Scope Waveform Freq Sweep Status

Sample Rate 1,500 Num Chan 13 Trigger Internal

TIME SLOT	#	DRIVER			COIL								
		FREQUENCY	PHASE	DRIVE	1	2	3	4	5	6	7	8	
1	1	400.000 KHz	0.000°	75.00%	1	2	3						
2	1	300.000 KHz	0.000°	75.00%	4	5	6						
3	1	200.000 KHz	0.000°	75.00%	7	8	9						
4	1	100.000 KHz	0.000°	75.00%	10	11	12	13					

SLOT	DELAY (uS)	INTEG (wave)	TIME (uS)	ENCODER				
				1	2	3	4	5
1	30	25	93					
2	40	25	124					
3	40	25	166					
4	50	23	281					

SLOT	COIL INPUT GAIN (dB)							
	1	2	3	4	5	6	7	8
1	14	14	14					
2	14	14	14					
3	14	14	14					
4	14	14	14	14				

COIL	TYP	BC	HN	RFT	CAP	NAME
1	DIF				A	0
2	DIF				A	0
3	DIF				A	0
4	TRG				A	0
5						
6						
7						
8						

666 of 666 uS

OK Cancel

Setup Acquisition Screen

The screenshot shows the 'Setup Acquisition Screen' with several callout boxes:

- RPC SPD 300 RPM:** Set desired RPC speed here
- RPC OFF / PLAN:** Turns RPC on and off. Tester must be off before turning RPC on.
- TEST OPTIONS (CAL, SEC, ROW, TUB, TIME):** When tester is on, speed of probe will display here. Turns red when speed is outside of the set tolerance in test options.
- 5.00V:** Set RPC motor unit voltage here. Higher values will spin the motor unit faster.
- 0.00:** IR Comp feedback setting. Increasing this value will allow the motor unit to remain at desired speed under load. Too high of a setting and the motor unit will exceed the desired speed under load.
- C:** Auto Speed Calibration. With RPC and tester on, select this button to automatically calibrate to the set RPC speed.

Additional screen details:

- Buttons: TEST OPTIONS, TESTER CONFIG, RPC SPD 300 RPM, RPC OFF, PLAN, CAL, SEC, ROW, TUB, TIME, TESTER OFF, ACQUIRE.
- Display: 1, 0, 1, 1, ?
- ACQUIRED: 2 of 2
- Table:

ENTRY	D	SEC	ROW	TUB	CNT
1	✓	0	1	1	2
2	✓	0	2	2	2