Table S1. Phases and Relative Amplitudes of Bioluminescense Rhythm Driven by Clock-Controlled Elements, Related to Figures 1, 2, 3, 4, and 6

Related to	Reporter construct	Phase (hours) (n = 3, if not stated)		Relative amplitude (n = 3, if not stated)		
Figure 1A		Mean	SD	Mean	SD	
	P(*Cry1*)	9.60	0.11	---	---	
	E'-box-P(SV40)	3.53	0.04	---	---	
	D-box-P(SV40)	10.42	0.16	---	---	
Figure 1D						
	Cry1proD-P(SV40)	12.37	0.05	---	---	
	E'-box-P(SV40)	3.41	0.14	---	---	
	D-box-P(SV40)	10.38	0.09	---	---	
Figure 2B						
	P(*Cry1*)	10.51	0.30	---	---	
	P(*Cry1*)-*Cry1* intron 1.03k	14.62	0.20	---	---	
	P(*Cry1*)-*Cry1* intron 336	14.32	0.23	---	---	
	P(*Cry1*)-*Cry1* intron Δ336	10.37	0.24	---	---	
Figure 2C						
	no *Cry1* intron	10.04	0.13	---	---	
	upstream of P(*Cry1*)	12.22	0.05	---	---	
	downstream of P(*Cry1*)	14.94	0.34	---	---	
	inside of the coding sequence	13.91	0.04	---	---	
	downstream of the coding sequence	12.61	0.39	---	---	
Figure 3C						
	P(SV40)	---	---	0.05	0.00	n=2
	P(SV40)-*Cry1* intron 336	17.58	0.52	0.29	0.00	
	P(SV40)-*Cry1* intron 336 R1deletion	17.28	---	0.15	0.05	n=2
	P(SV40)-*Cry1* intron 336 R2 deletion	17.77	0.17	0.12	0.04	n=2
	P(SV40)-*Cry1* intron 336 R1,2 deletion	---	---	0.05	0.00	
	P(SV40)-*Cry1* intron 336 R1 mutation	17.14	0.29	0.14	0.00	
	P(SV40)-*Cry1* intron 336 R2 mutation	---	---	0.05	0.00	
	P(SV40)-*Cry1* intron 336 R1,2 mutation	---	---	0.05	0.01	
	P(SV40)-*Cry1* intron 336 R1 inversion	17.30	0.30	0.27	0.02	
	P(SV40)-*Cry1* intron 336 R2 inversion	17.62	0.74	0.12	0.00	
	P(SV40)-*Cry1* intron 336 R1,2 inversion	17.74	0.13	0.11	0.03	n=2

Table S1 (*continued*)

Related to	Reporter construct	Phase (hours) (n = 3, if not stated)		Relative amplitude (n = 3, if not stated)		
		Mean	SD	Mean	SD	
Figreu 3E						
	P(*Cry1*)	10.63	0.18	0.17	0.01	
	P(*Cry1*)-*Cry1* intron 336	14.03	0.45	0.21	0.08	n=2
	P(*Cry1*)-*Cry1* intron 336 R1deletion	11.70	0.51	0.19	0.02	
	P(*Cry1*)-*Cry1* intron 336 R2 deletion	11.65	0.22	0.23	0.01	
	P(*Cry1*)-*Cry1* intron 336 R1,2 deletion	10.36	0.58	0.24	0.01	
	P(*Cry1*)-*Cry1* intron 336 R1 mutation	12.49	0.11	0.20	0.01	
	P(*Cry1*)-*Cry1* intron 336 R2 mutation	11.18	0.07	0.25	0.00	
	P(*Cry1*)-*Cry1* intron 336 R1,2 mutation	9.61	0.45	0.24	0.02	
	P(*Cry1*)-*Cry1* intron 336 R1 inversion	13.43	0.53	0.21	0.06	
	P(*Cry1*)-*Cry1* intron 336 R2 inversion	10.48	0.85	0.21	0.01	
	P(*Cry1*)-*Cry1* intron 336 R1,2 inversion	10.96	0.82	0.21	0.00	
Figure 4A						
	E'-box-P(SV40)	3.27	0.18	0.63	0.04	
	E'-box-P(SV40)-*Cry1* intron 336	2.13	1.79	0.10	0.00	
	D-box-P(SV40)	9.31	0.16	0.21	0.01	
	D-box-P(SV40)-*Cry1* intron 336	14.48	0.21	0.33	0.01	
	RRE-P(SV40)	17.04	0.12	0.37	0.01	
	RRE-P(SV40)-*Cry1* intron 336	16.32	0.04	0.64	0.01	
Figure 6A						
	3×E'-box-P(SV40)	3.37	0.11	0.40	0.03	
	3×RRE-P(SV40)	18.55	0.13	0.26	0.01	
	P(*Cry1*)	9.61	0.13	0.18	0.01	
	3×D-box-P(SV40)	9.84	0.50	0.14	0.02	
	2×D-box-P(SV40)	11.48	0.21	0.08	0.01	
	1×D-box-P(SV40)	---	---	0.06	0.00	
	3×Cry1proD-P(SV40)	13.43	0.17	0.15	0.00	
	2×Cry1proD-P(SV40)	12.70	0.32	0.18	0.01	
	1×Cry1proD-P(SV40)	12.00	0.20	0.11	0.05	
	P(SV40)	---	---	0.06	0.00	

Table S1 (*continued*)

Related to	Reporter construct	Phase (hours) (n = 3, if not stated)		Relative amplitude (n = 3, if not stated)	
		Mean	SD	Mean	SD
Figure 6B					
	P(*Cry1*)-*Cry1* intron 336	14.61	0.14	0.19	0.01
	3×D-box-P(SV40)-*Cry1* intron 336	15.46	0.30	0.21	0.02
	2×D-box-P(SV40)-*Cry1* intron 336	16.60	0.20	0.26	0.01
	1×D-box-P(SV40)-*Cry1* intron 336	17.35	0.10	0.29	0.02
	3×Cry1proD-P(SV40)-*Cry1* intron 336	16.64	0.11	0.26	0.01
	2×Cry1proD-P(SV40)-*Cry1* intron 336	16.56	0.15	0.27	0.02
	1×Cry1proD-P(SV40)-*Cry1* intron 336	16.61	0.16	0.21	0.03
	P(SV40)-*Cry1* intron 336	17.39	0.12	0.34	0.02

Table S2. Relative Amplitudes of Rescued Rhythms, Related to Figure 5

Related to	Rescue construct	Relative amplitude (n = 3)	
		Mean	SD
Figure 5A			
	without *Cry1*	0.14	0.02
	P(*Cry1*)	0.23	0.00
	P(*Cry1*)-*Cry1* intron 336	0.81	0.01
	P(*Cry1*)-*Cry1* intron 336 R1deletion	0.41	0.00
	P(*Cry1*)-*Cry1* intron 336 R2 deletion	0.48	0.02
	P(*Cry1*)-*Cry1* intron 336 R1,2 deletion	0.32	0.01
	P(*Cry1*)-*Cry1* intron 336 R1 mutation	0.41	0.01
	P(*Cry1*)-*Cry1* intron 336 R2 mutation	0.36	0.03
	P(*Cry1*)-*Cry1* intron 336 R1,2 mutation	0.30	0.01
	P(*Cry1*)-*Cry1* intron 336 R1 inversion	0.79	0.03
	P(*Cry1*)-*Cry1* intron 336 R2 inversion	0.60	0.01
	P(*Cry1*)-*Cry1* intron 336 R1,2 inversion	0.54	0.02

Table S3. Periods of Rescued Rhythms, Related to Figures 6, 7, S5, and S6

Related to	Rescue construct	Period (hours) (n = 3)	
		Mean	SD
Figure 6D			
	P(SV40)-*Cry1* intron 336	30.89	0.13
	P(*Cry1*)-*Cry1* intron 336	27.03	0.15
	3×D-box-P(SV40)-*Cry1* intron 336	29.42	1.33
	2×D-box-P(SV40)-*Cry1* intron 336	29.45	0.12
	1×D-box-P(SV40)-*Cry1* intron 336	30.27	0.09
	3×Cry1proD-P(SV40)-*Cry1* intron 336	28.80	0.01
	2×Cry1proD-P(SV40)-*Cry1* intron 336	28.90	0.12
	1×Cry1proD-P(SV40)-*Cry1* intron 336	29.75	0.10
Figure 7A			
	P(*Cry1*)-*Cry1* intron 336-*Cry1*	26.77	0.12
	P(*Cry1*)-*Cry1* intron 336 R1,2 mutation-*Cry1*	---	---
	P(SV40)-*Cry1* intron 336-*Cry1*	32.00	0.58
	P(SV40)-*Cry1* intron 336 R1,2 mutation-*Cry1*	---	---
Figure S5E			
	P(*Cry1*)-*Cry1* intron 336-*Cry1*	26.24	0.27
	P(SV40)-*Cry2*	---	---
	P(*Cry1*)-*Cry1* intron 336-*Cry1* and P(SV40)-*Cry2*	25.38	0.06
Figure S6D			
	P(*Cry1*)-*Cry1*	---	---
	P(*Cry1*)-*Cry1* intron 336-*Cry1*	27.02	0.01
	P(SV40)-*Cry1*	---	---
	P(SV40)-*Cry1* intron 336-*Cry1*	30.99	0.26
	P(TKms)-*Cry1*	---	---
	P(TKms)-*Cry1* intron 336-*Cry1*	30.65	0.21

Table S4. Phases of Transcription Factors and Outputs Produced by Those Factors, Related to Figure S7A

Related to	Reporter construct	Phase (hours) (n = 3)		Relative amplitude (n = 3)		Note
Figure S7A		Mean	SD	Mean	SD	
	3×E'-box-P(SV40)	4	0.29	1.105	0.016	morning-time activator/night-time repressor
	3×RRE-P(SV40)	17.10	0.37	0.857	0.006	
	UAS-P(CMVmini)	7.70	0.85	0.287	0.019	
	3×D-box-P(SV40)	8.90	0.28	0.338	0.000	
	3×E'-P(SV40)	3.90	0.14	0.888	0.022	day-time activator/morning-time repressor
	UAS-P(CMVmini)	16.60	1.04	0.270	0.023	
	3×RRE-box-P(SV40)	16.90	0.55	0.721	0.028	
	3×D-box-P(SV40)	9.00	1.29	0.357	0.012	night-time activator/day-time repressor
	UAS-P(CMVmini)	22.20	0.70	0.530	0.032	
	3×RRE-P(SV40)	16.90	0.55	0.721	0.028	
	3×E'-box-P(SV40)	3.90	0.30	0.934	0.027	morning-time repressor/night-time activator
	UAS-P(CMVmini)	20.60	0.91	0.705	0.048	
	3×E'-box-P(SV40)	3.90	0.98	1.095	0.132	
	3×D-box-P(SV40)	7.40	0.14	0.452	0.001	day-time repressor/morning-time activator
	UAS-P(CMVmini)	4.70	0.40	0.286	0.004	
	3×D-box-P(SV40)	9.70	0.81	0.438	0.026	
	3×RRE-P(SV40)	18.40	0.34	0.711	0.035	night-time repressor/day-time activator
	UAS-P(CMVmini)	11.00	0.79	0.204	0.041	