QDYN Config Reference Card

bwr (lines)
lambda [zero]; omega [zero]; width [zero]

dissipator (lines)
add_to_H_jump ['']; conjg_pulse [.false.];
conv_to_superop [.true.];
expand_hermitian [.false.]; filename [''];
label ['']; n_photons [1]; op_unit ['iu'];
pulse_id [0]; real_op [.true.];
sparsity_model ['']; type ['']

eigensystem (lines)
diagtype ['']; label ['']; nev [0];
nev_fac [zero]; pulse_val_i [0]; read_dump [''];
write_dump ['']

grid (lines)
E_max [zero]; beta [zero]; coord_type [''];
dim [0]; dr_max [huge(zero)]; label ['']; m [0];
m1 [0]; m2 [0]; maptype ['']; moveable [.false.];
nl [0]; npt [0]; nr [0]; r_max [zero];
r_max1 [zero]; r_max2 [zero]; r_min [zero];
read_envelope ['']; spher_method [''];
write_envelope ['']

ham (lines)
A [zero]; B [zero]; C [zero]; C12 [zero];
C3 [zero]; D [zero]; E_0 [zero]; E_min [zero];
V_max [huge(zero)]; V_min [-huge(zero)];
asym_SO [zero]; asym_stark [zero];
conjg_pulse [.false.]; cos_theta [.false.];
depth [zero]; deriv_before [.false.];
energy_cutoff [huge(zero)]; eta [zero];
expand_hermitian [.false.]; filename [''];
filename_int ['']; filename_spinops [''];
fwhm [zero]; imag_op [.false.]; int_model [''];
is_periodic [.false.]; jmax [0]; kin_base [''];
label ['']; laser_I [zero]; levelfile [''];
lin_grad [zero]; map_to_j [-1]; mass [one];
max_rotbarr [huge(zero)];
memoize_ops [.false.]; mirror_ex [.false.];
mu_a [zero]; mu_b [zero]; mu_c [zero];
n_ex_max [0]; n_ex_min [0]; n_photons [1];
n_spins [0]; n_surf [0];
no_asymptote_check [.false.];
no_splining [.false.]; offset [zero];
op_form ['']; op_surf [0]; op_surf_1 [0];

op_surf_2 [0]; op_type ['']; op_unit ['iu'];
pulse_id [0]; pulse_pol ['']; r_star [zero];
r_unit ['iu']; rat_r_0 [zero]; rc [zero];
real_op [.true.]; rotbarr_j [0]; rshift [zero];
sort_by_energy [.false.]; sparsity_model [''];
specrad_method ['']; step_ex [1];
subspace ['total']; type [''];
velocity_gauge [.false.]; w_0 [zero];
width [zero]

observables (lines)
C12 [zero]; C3 [zero]; E_0 [zero];
V_max [huge(zero)]; V_min [-huge(zero)];
asym_SO [zero]; asym_stark [zero];
column_label ['']; conjg_pulse [.false.];
cos_theta [.false.]; depth [zero];
deriv_before [.false.]; eta [zero];
exp_surf [0]; exp_unit ['iu'];
expand_hermitian [.false.]; filename [''];
from_time_index [1]; fwhm [zero];
imag_op [.false.]; in_lab_frame [.false.];
is_real [.true.]; kin_base ['']; label [''];
laser_I [zero]; lin_grad [zero]; map_to_j [-1];
mass [one]; n_photons [1]; n_surf [0];
no_asymptote_check [.false.];
no_splining [.false.]; offset [zero];
op_form ['']; op_surf [0]; op_surf_1 [0];
op_surf_2 [0]; op_type ['']; op_unit ['iu'];
outfile ['']; pulse_id [0]; r_star [zero];
r_unit ['iu']; rat_r_0 [zero]; rc [zero];
real_op [.true.]; rotbarr_j [0]; rshift [zero];
sparsity_model ['']; square ['']; step [1];
subspace ['total']; time_unit ['iu'];
to_time_index [-1]; type [''];
velocity_gauge [.false.]; w_0 [zero];
width [zero]

oct (items)
A [zero]; ABC_dat ['']; B [zero]; C [zero];
J_T_conv [zero]; alpha1_split [0.5];
alpha2_split [0.5]; bwr_base ['']; bwr_nint [0];
continue [.true.]; delta_J_T_conv [zero];
delta_J_conv [zero];
dynamic_la_marginfac [2.0];
dynamic_la_wait [10]; dynamic_lambda_a [zero];
dynamic_sigma [.false.]; ema_alpha [0.3];

g_a ['delta_eps_sq']; grad_order [2];
iter_dat ['']; iter_start [1]; iter_stop [0];
keep_pulses ['']; krotov2_conv_dat [''];
lambda_b [zero]; lbfgs_memory [0];
limit_pulses [.false.]; linesearch [0];
lnsrch_la_stepsize [2];
lnsrch_mode ['log-full'];
lnsrch_nrsteps [15]; max_disk_mb [0];
max_pulse_iter [1]; max_ram_mb [0];
max_seconds [0]; method ['']; params_file [''];
pulse_relerr [1.0d-5]; re_init_prop [.true.];
sigma_form ['']; storage_folder ['.'];
strict_convergence [.false.]; tau_dat [''];
tf_self_cons_max [10]; tf_self_cons_min [1];
transf_func_file [''];
undist_diff_conv [1.0d-5];
use_krotov_line_search [.false.]

prop (items)
ITO_do_iter [.true.];
ITO_guess_method ['extrapol'];
cheby_prec [zero]; inhom_expan_err [1.0d-12];
inhom_max_order [5]; inhom_method [''];
mcwf_order [2]; method ['']; n_taylor [20];
newton_arnoldi_order [4];
newton_max_restarts [1000];
newton_norm_min [1.0d-15];
newton_relerr [1.0d-13];
rk45_abserr [1.0d-15]; rk45_relerr [1.0d-11];
use_mcwf [.false.]

psi (lines)
a [zero]; filename ['']; fromE [-huge(zero)];
j [0]; k_0 [zero]; label ['']; m [0]; n [1];
phase [zero]; r_0 [zero]; sigma [zero]; spin [1];
surf [1]; type ['']; w_0 [zero]

pulse (lines)
E_0 [zero]; ampl_unit ['iu'];
check_tgrid [.true.]; chirprate [zero];
delay [zero]; dp_separation [zero];
filename ['']; ftbaseline [zero]; id [0];
is_complex [.false.]; oct_FWHM_max [zero];
oct_FWHM_min [zero];
oct_increase_factor [zero];
oct_lambda_a [zero]; oct_lambda_intens [zero];
oct_outfile ['']; oct_outfile_param [''];

oct_parametrization ['']; oct_phi_max [zero];
oct_phi_min [zero]; oct_pulse_max [zero];
oct_pulse_min [zero]; oct_shape [''];
oct_shapefile [''];
oct_specfil_frq_thld [1e-12];
oct_spectral_filter ['']; oct_t_0_max [zero];
oct_t_0_min [zero]; oct_w_L_max [zero];
oct_w_L_min [zero]; optimize [.true.];
phi [zero]; rwa [.false.]; scale [zero];
shape_t_start [zero]; shape_t_stop [zero];
t_0 [zero]; t_FWHM [zero]; t_fall [zero];
t_rise [zero]; t_start [zero]; t_stop [zero];
time_unit ['iu']; transf_func_file [''];
type ['']; w_L [zero]; w_flip [zero];
w_step [zero]

scattering (items)
A1 [zero]; A2 [zero]; B_static [zero];
E_grid_type ['']; E_max [zero]; E_min [zero];
E_static [zero]; I [zero]; R1 [zero]; R2 [zero];
beta1 [zero]; beta2 [zero]; coup_al [.false.];
coup_d [.false.]; coup_i1s1 [.false.];
coup_i2s1 [.false.]; coup_i2s2 [.false.];
coup_s1s2 [.false.]; coup_sl [.false.];
diff_cross_section [.false.]; energy [zero];
energy_unit ['iu']; entrance_channel [0];
entrance_surf [1]; filename ['']; g1 [zero];
g2 [zero]; i1 [zero]; i2 [zero]; l [0]; l_max [0];
method ['']; mi1 [zero]; mi2 [zero]; ml [0];
ms1 [zero]; ms2 [zero]; nE [0]; ntheta [0];
s1 [zero]; s2 [zero]; scat_length [.false.];
scat_phase [.false.]; system [''];
wavefunctions [.false.];
wigner_tables [.false.]; zeta1 [zero];
zeta2 [zero]

sceint (items)
Z [0]; field_comp ['']; field_gauge [''];
imag_spharm [.false.]; l_max [0]; n_frozen [0];
n_max [0]; numeric_2e [.false.];
orbital_ints [.true.];
prim_integrals [.false.]

tgrid (items)
dt [zero]; fixed [.false.]; nt [0];
t_start [zero]; t_stop [zero]