

Ambient Hamiltonian: [[1 0] [0 -1]]
Control Hamiltonians:[array([[0, 1], [1, 0]]), array([[0.+0.j, 0.-1.j], [0.+1.j, 0.+0.j]]), array([[1, 0], [0, -1]])]
Detunings: [0.001, 0.001, 0.001, 0.001]
dt: 0.251327412287
Probs: [0.30177028 0.19216837 0.24107315 0.20680539 0.0581828]
Target Operator: [[0.70710678 0.70710678] [0.70710678 -0.70710678]]
Time: 328.370555878

Controlset: [array([[-0.22692636, -0.10714737, -0.22235489], [-0.25834866, 0.05207266, -0.34121931], [-0.39102806, -0.04592285, -0.33672063], [-0.20644329, -0.08268705, -0.23861079], [-0.26579547, -0.09800941, -0.24955059], [-0.39577912, 0.01052054, -0.24478444], [-0.21096565, -0.0492366 , -0.42297559], [-0.1944874 , -0.05642478, -0.25571272], [-0.27335527, -0.13533046, -0.2628462], [-0.22515206, 0.01652426, -0.28154836], [-0.20471352, 0.06900395, -0.41579163], [-0.36641166, -0.06437701, -0.38664204], [-0.21805691, -0.03733556, -0.24590517], [0.33003535, -0.02661359, -0.42902915], [-0.20425307, -0.00454153, -0.38128619], [-0.16812683, 0.10653053, -0.35641589], [-0.35064022, -0.00493981, -0.2292482], [-0.27164542, 0.04619895, -0.31522111], [-0.2138231 , 0.02432876, -0.24276039], [-0.32314452, -0.04538462, -0.35081396], [-0.27254292, -0.04706562, -0.25461403], [-0.20926835, -0.00101882, -0.31014918], [-0.2138786 , 0.07899632, -0.20679425], [-0.33793907, -0.03952898, -0.27987157], [-0.2011906 , 0.04435219, -0.25755233], [-0.24614058, 0.06214347, -0.22423093], [-0.17380285, -0.07124193, -0.28679287], [-0.16537024, 0.057076 , -0.19423607], [-0.28439927, 0.0631166 , -0.30690575], [-0.21237885, -0.03137796, -0.25490376], [-0.18400924, -0.01264107, -0.2338531], [-0.22993944, 0.10365671, -0.20423512], [-0.19666913, -0.00588035, -0.22711311], [-0.36144485, -0.07937033, -0.22597098], [-0.36982485, 0.0689514 , -0.23558402], [-0.23157767, 0.04873735, -0.35441602], [-0.21634148, 0.04981771, -0.23289055], [-0.2507679 , 0.00059106, -0.2544584], [-0.21670974, -0.01869885, -0.38616004], [-0.2029788 , 0.02164635, -0.22945329], [-0.22525538, 0.05173444, -0.35967527], [-0.32139475, 0.02524144, -0.24917257], [-0.21846107, 0.01468148, -0.29825453], [-0.18674599, 0.13396449, -0.34478584], [-0.31979561, 0.08207153, -0.20737096], [-0.15031087, 0.10254863, -0.15237687], [-0.27852101, 0.04301006, -0.16919961], [-0.33895956, 0.03262059, -0.19600083], [-0.24417157, -0.02361142, -0.14598048], [-0.33891963, -0.01889292, -0.26452825]), array([[-0.52871218, -0.05010459, -0.48633565], [-0.49033882, 0.02695759, -0.53992695], [-0.54547459, 0.00916114, -0.4300411], [-0.49384928, -0.05892259, -0.42856433], [-0.47354557, -0.1298301 , -0.45586918], [-0.47859313, -0.13466811, -0.47259235], [-0.60521596, -0.14593958, -0.47137664], [-0.56628908, -0.19047802, -0.49860045], [-0.4273867 , -0.18347492, -0.47323378], [-0.58193144, -0.15259561, -0.48123771], [-0.68334039, -0.16129702, -0.53025318], [-0.53977457, -0.15032127, -0.52684545], [-0.53148295, -0.24044545, -0.64106522], [-0.64525683, -0.29113336, -0.4731845], [-0.41729651, -0.24080956, -0.44494443], [-0.61980837, -0.13150885, -0.55443507], [-0.57827458, -0.2229288 , -0.51120682], [-0.43292091, -0.06652025, -0.6036857], [-0.41200508, -0.07280347, -0.52000793], [-0.39495929, 0.04853771, -0.51033435], [-0.36580442, -0.10564433, -0.43597274], [-0.3255676 , -0.00163884, -0.40043909], [-0.44596642, 0.06888472, -0.31965533], [-0.34331386, 0.04856137, -0.39220551], [-0.471476 , 0.00433178, -0.33169143], [-0.49242271, -0.04925527, -0.49085565], [-0.38367191, -0.02137184, -0.32833767], [-0.51010272, -0.03117617, -0.37772265], [-0.34744929, -0.07744594, -0.40649798], [-0.37560367, 0.02024271, -0.35856361], [-0.51083863, -0.09700345, -0.56985183], [-0.40913873, 0.07485806, -0.37981307], [-0.34235978, 0.08609168, -0.45287845], [-0.40891372, -0.06806216, -0.401075], [-0.52226377, -0.08620989, -0.58868693], [-0.30889702, 0.01799653, -0.47696152], [-0.50907564, 0.07839349, -0.33890619], [-0.50470661, 0.031678], [-0.30621628], [-0.34466549, 0.0030509 , -0.33290973], [-0.35353054, -0.07930898, -0.32897713], [-0.33565794, 0.05760792, -0.31579473], [-0.33125699, -0.07379445, -0.30496651], [-0.32756838, -0.00526656, -0.29602348], [-0.30616977, -0.01583452, -0.32093307], [-0.5074554 , 0.001742 , -0.39302793], [-0.34607636, -0.08352144, -0.35843738], [-0.32618011, -0.03150683, -0.37353777], [-0.2710887 , 0.11518375, -0.36091286], [-0.39021303, 0.1251683 , -0.23776192], [-0.46228172, -0.0344523 , -0.30092724]), array([[-0.30306535, 0.05801062, -0.54529199], [-0.34001749, 0.00653443, -0.50626071], [-0.43712482, 0.10186807, -0.4920803], [-0.3185503 , 0.02981555, -0.49281372], [-0.49013044, 0.06869689, -0.55684799], [-0.33585407, -0.0055435 , -0.70800058], [-0.3596215 , 0.12098967, -0.62231852], [-0.47895263, 0.1359762 , -0.46301767], [-0.3486542 , -0.05961915, -0.46813931], [-0.36154542, 0.08809585, -0.45957788], [-0.49987677, 0.0591047 , -0.40812616], [-0.47740227, -0.06784003, -0.46748061], [-0.31412485, -0.06518242, -0.57466049], [-0.33121714, 0.05654147, -0.39737676], [-0.38471606, -0.11770085, -0.37686771], [-0.3831765 , 0.01236282, -0.35465871], [-0.29340335, -0.05762228, -0.51879593], [-0.34658222, 0.03158131, -0.38776484], [-0.39199612, -0.09947911, -0.33066074], [-0.27042004, -0.04806111, -0.32670648], [-0.32457598, -0.1495811 , -0.26386989], [-0.2423748 , -0.03743988, -0.324538], [-0.26186425, -0.03452976, -0.37991947], [-0.18436856, -0.15031778, -0.25815564], [-0.28477728, -0.12673183, -0.41873381], [-0.20557885, -0.01723001, -0.31528302], [-0.2950942 , -0.02441124, -0.40086867], [-0.26478955, -0.00642766, -0.2905503], [-0.27832447, 0.01433907, -0.52802941], [-0.33025155, -0.03008048, -0.36754198], [-0.3890836 , 0.00977965, -0.56814456], [-0.47932232, -0.01643607, -0.43807831], [-0.37448688, -0.12413733, -0.38916299], [-0.29023228, -0.17512106, -0.33585947], [-0.36052876, 0.00820676, -0.49080754], [-0.57737613, 0.02422842, -0.55101637], [-0.44124102, -0.05288936, -0.43252847], [-0.44957098, -0.09731259, -0.62462017], [-0.57986416, -0.02600928, -0.50854925], [-0.45593621, -0.02094796, -0.46091905], [-0.49981459, 0.00339278, -0.65712703], [-0.53233417, 0.08011289, -0.487456], [-0.59799744, 0.10331916, -0.66049877], [-0.69323171, 0.01342373, -0.4404024], [-0.6195505 , -0.02460129, -0.36190384], [-0.57338205, 0.0387694], [-0.48278493], [-0.63002911, -0.00400096, -0.52390855], [-0.75469481, -0.01231831, -0.52065907], [-0.79495221, -0.00420079, -0.41989102], [-0.68203461, -0.03595583, -0.39622114]), array([[-4.44661900e-02, -5.62713764e-02, -7.65809180e-02], [-1.00748963e-01, -5.54312326e-02, -1.77270763e-01], [-3.07556243e-02, -8.02631072e-03, -1.51396161e-01], [-9.33577337e-02, -4.57590372e-02, -3.01224177e-02], [-2.21376004e-02, -9.62340021e-02, -2.06003453e-02], [-1.50244613e-01, -6.54804470e-02, -1.71370002e-01], [-1.05320535e-01, 9.47600504e-02, -1.78470224e-01], [-1.61936036e-02, 6.70898146e-02, -1.49501491e-01], [-8.32786097e-02, 8.40929934e-02, -4.99327587e-02], [-1.22541500e-01, -8.47848925e-02, -1.08534357e-01], [-9.97144389e-02, -4.11501889e-02, -8.48114015e-02], [-1.74399655e-01, -4.49687583e-02, -1.85948397e-01], [-3.52036795e-02, 2.85922172e-02, -6.16348237e-02], [-1.72919458e-01, -5.51250581e-02, -1.96337713e-01], [-5.18953973e-02, 9.84280693e-02, -6.87987439e-02], [-1.81829490e-01, 4.87632701e-02, -1.15856830e-02], [-4.49015882e-02, 2.12513620e-02, -1.42032171e-01], [-1.47667641e-01, 7.33795824e-02, -1.54182419e-01], [-1.43090183e-01, -1.08021492e-01, -5.48407809e-03], [-5.36602519e-02, 2.94940809e-02, -1.01517856e-02], [-1.04717069e-01, 7.77396777e-02, -8.87907190e-02], [-1.79685394e-02, -8.49939091e-02, -1.49519457e-01], [-1.09991708e-01, -8.36956562e-02, -6.50121755e-02], [-3.09402362e-03, -9.85129452e-02, -2.00527882e-01], [-2.31035292e-02, 8.24259994e-02, -8.45841680e-02], [-5.62751342e-05, 4.00315791e-02, -7.52214828e-02], [-1.36344726e-02, -8.18992880e-02, -4.95322642e-02], [-1.23998877e-01, -3.31709256e-02, -1.80345723e-02], [-6.30286988e-02, -2.61784603e-02, -2.49605793e-02], [-8.93553657e-02, -1.06833454e-01, -1.88224847e-01], [-1.08395266e-01, 7.20511331e-02, -7.05642052e-02], [-1.61067123e-01, 4.09289299e-02, -4.95659335e-02], [-1.65925968e-01, -8.81050820e-03, -1.01164273e-01], [-8.31242076e-02, 6.34911591e-02, -1.94197326e-01], [-8.18002926e-02, 4.78748634e-02, -1.03350686e-01], [-7.01361653e-02, -5.69629608e-02, -1.09810474e-02], [-1.86048460e-

02, [-4.17567836e-02, -1.04728326e-01], [-1.17937192e-01, 8.02955234e-02, -1.48288980e-01], [-1.34127250e-02, 7.07603144e-02, -5.42016105e-02], [-3.47036948e-02, 9.71882516e-03, -7.17907302e-04], [-2.61335965e-02, 2.32238672e-02, -1.97864861e-03], [-2.58262118e-02, -5.01563573e-02, -1.04922922e-01], [-5.12728198e-02, 1.55194443e-02, -1.68546883e-01], [-1.02296183e-01, 8.66906547e-02, -9.13867260e-02], [-6.73464180e-02, 2.61277016e-03, -7.19211820e-02], [-9.59092421e-02, 1.01164230e-01, -4.36448097e-02], [-1.55510022e-01, -6.48509352e-02, -5.22959140e-02], [-2.37598430e-02, -7.16977119e-02, -1.64621089e-01], [-7.95494217e-02, -1.93992117e-02, -1.56116610e-01], [-8.65381584e-02, -2.88293330e-02, -1.10065009e-01]]), array([[[-0.55144795, -0.02898609, -0.67250677], [-0.52283954, -0.08536377, -0.71642088], [-0.528766 , 0.03965311, -0.70078543], [-0.71111402, 0.0920748 , -0.87236468], [-0.56320669, 0.15351419, -0.81304847], [-0.68975274, -0.05555863, -0.66580212], [-0.55484567, 0.03344287, -0.65391179], [-0.56025319, 0.03041527, -0.76424422], [-0.57327744, 0.15176069, -0.58344019], [-0.6282424 , -0.02168944, -0.60844803], [-0.5399906 , -0.00185783, -0.64492209], [-0.66535992, 0.09652863, -0.73297482], [-0.54516551, 0.0271216 , -0.63613977], [-0.55599507, 0.03057482, -0.69323618], [-0.78304868, -0.01703674, -0.82565279], [-0.54926642, 0.08479095, -0.97942785], [-0.68658098, 0.16587988, -0.75331751], [-0.77221019, 0.07771091, -0.85700825], [-0.69834609, 0.09756621, -0.68085972], [-0.59113586, 0.03600981, -0.65023385], [-0.60392271, 0.07145371, -0.83121185], [-0.7779298 , 0.07411793, -0.54250305], [-0.55767446, -0.07405932, -0.56915149], [-0.61794098, 0.01286515, -0.65160672], [-0.63589965, 0.12797553, -0.62907911], [-0.70210151, 0.07770302, -0.63168405], [-0.68575532, -0.02539819, -0.69086942], [-0.65673849, 0.02483823, -0.68386117], [-0.66677145, 0.08793386, -0.60040153], [-0.74760893, 0.14407562, -0.69384234], [-0.82056005, 0.12160942, -0.53549203], [-0.71714951, -0.09928789, -0.47841469], [-0.63183426, -0.01570761, -0.50556108], [-0.61729595, -0.04981722, -0.73969635], [-0.6179962 , -0.04652962, -0.60908338], [-0.60765537, 0.08440052, -0.58851904], [-0.64558907, 0.0826913 , -0.67889625], [-0.71729914, -0.00835651, -0.61426207], [-0.70198786, 0.0844335 , -0.50267075], [-0.62266455, 0.03129808, -0.72544384], [-0.66886942, 0.12527162, -0.50461106], [-0.68024457, 0.09084867, -0.47630629], [-0.53197595, 0.02641217, -0.37583512], [-0.52841658, -0.09062745, -0.2618816], [-0.38534378, -0.05966471, -0.32533321], [-0.40981114, -0.07078192, -0.3993578], [-0.42355366, 0.05647658, -0.35585935], [-0.5039036 , -0.05513019, -0.38258718], [-0.40378764, 0.03782243, -0.29123008], [-0.49597204, 0.00499585, -0.56732467]]])

