How to use Citect with DVP28SV11R/T + DVPEN01-SL

In this technical note, we cover the following topics.

- 1. How to connect DVP28SV and EN01
- 2. How to setup Citect communication with DVP28SV by EN01
- 3. How to setup Citect communication with DVP28SV by RS-485

1. How to connect DVP28SV and EN01

- 1-1. Plug EN01 to 28SV left side.



1-3. Open WPLSoft to configure EN01





: Looking for EN01 module via broadcasting.

: Looking for EN01 module via indicating IP address.

: Configuring EN01 via RS-232.(Doesn't need to connect to Ethernet)

- 1-4. There is two way to search EN01 via Ethernet.
- Broadcast:

If this is the first time you connect EN01 to Ethernet and have no idea what's its IP address, then you can use "broadcast" to look for EN01 in the network.



Choosing "option—communication setting" to set PLC communication port.

Туре	RS232	
Protocol	RS232 USB	
COM Port	Ethemet	 ASCII
Data Length	7	C RTU
Parity	Even •	1
Stop Bits	1 -	Auto-Detec
Baud Rate	9600 -	I
Station Address	0 4	Default
Baudrate Setting	Decided by	
C WPL		
Setup Responding	g Time	
Times of Auto-ret	av.	3 +
Time Interval of A	uto-retry (sec.)) 3 1

Set "Ethernet" as your communication port.



Press "Broadcast" button, then WPLSoft will start to search EN01 in the network.



If success, the left window will show all EN01 modules in the network.



Press "IP search" button, then the input IP address window will pop out. User can type IP address in the upper space.

If success, the result will be just like the broadcast.

- 1-5. How to configure EN01.
- Double click the module in the left window.
- The configuration window will be pop out.

Module DVPEN01-SL	Module Name Module Language	kisk English 🔫
IP Address 172.16.155.75 MAC Address	Enable MODBUS T	2 CP IP
Firmware Version 0.1 Lock Status	☞ Enable Time Server □ Start Daylight Savin	12 Time
🚽 Unlock	Time Server Time Zone	0. 0. 0. 0 (Gb4T-08:00)Taipei
Here is the basic setting, in	- shale the module name and NT	7 related parameters. DVPEN01 SLs. User can type what ever they want

- (1). The basic information of EN01, includes IP address, MAC address, firmware version and so on.
- (2). Module name and language. (user define)
- ③. Option of EN01.



Network setting -IP configuration (Static/DHCP), IP address, Netmask, Gateway.

- 2. How to setup Citect communication with DVP28SV by EN01
- 2-1. Open Citect Explorer after installation

th Law Iour Het	
CSV Example	- O T & CIER 1998 D O D D & ADD & ADD &
ujutlet	Constant V. Early
P Hy Harab 200 Comple 200 Comple 200 Comple	Gaphicz Tors Allens Station Concernant Deads (1997) A
	Create new project
	Cleate new project

2-2. Enter project name and description and click **OK**

CSV Enough City	et Eigiliane		. C X
The Ber Let Leb			
CSV Example	1	이 계 🖉 시 이 최종 🌰 🖼 🔄 🎦 🖉 🖓	D- EE 🖉
PointLis. P My Inspin F G CIV Pompla E Bourpla	Conned B Genie	Rev Proved (2011) Suck. (E2011) Domatica.	Pa Na
		Looke Chegore BloCalorCalor Proceeder to Douglate region to Douglate real block Douglate real block Douglate real block Endgemend to be	
Ready			

2-3. Select the project you created on left window and enter the Communication folder

🖀 1980) - Citert Beyles	
Sile Time Innis Heip	
EN01	- 2 2 4 4 4090 2 4 1 1 1 1 1 1 1 1 1 1
Project List	Codekck of 2001
Mr Freist Source Sou	Onghies Lag Lanz Syster Concernants Chede Film Chief WBA

2-4. Select Express IO Device Setup

EN01	- 1		리 북 🐑		西西 日	1 2 2 1	日本を開
Project List	Contents of Con-	unitation:					
MyProjects + CSV_Besorgie - EWOI + CSV_Besorgie EWOI - Tags - Akons	Express 1/0 Device Setup	10 Serven	Boods	Pods	Notens	1/0 Devices	10 Renapping
Estim Construietion Clade Files Clast/IDA Files							

2-5. IO device setting





	IP address: 172.16.155.75	
	Port 502 -	
	Use protocol	Pgotacol Help
Selected driver		
Manufacturer:	Modicon	
Model:	ISX Quantum	
• • • • • • • • • • • • • • • • • • •	Ethernet (TCP/IP)	

2-6. Select Tag folder, and double click Variable Tags



2-7. Set Tag name, data type, I/O device name and the Modbus address of the item (Please refer the appendix for detail Modbus address of Delta PLC). Press Add.

day a logiture	No.			000000		
Denie Mare	335er	2	allow	(140.04) (140.04)		
e fanction e Dans			Big Full State Pagend			
	baikesD	64 <u>34</u>	Labor St.			

2-8. Select **File→Compile**

Class Process Address 1 (1911) 1 - 1000001(1911)		
제 제상이의 화동은 사망과 그는 너 안안라의 것		
A design of the state of the st		
2		
Calvet Granz Arr 🔯		
Vanne 6.0.4 Cagnada a Chier Phy Lait (10) 2218		
Dakes Provide Rend David		
No Carbona		

2-9. Then back to main window to select **Pages** folder to create new page.



2-10. Choose the page style, and default is **normal**

-					
-	and the second s		• toten daniad	2	36
2			kg revision2		Concel
acer/book	InstantDend	roomel			Zie
_		A.12.010	0	18	
Bopupulage	popepumid	Fepg_smill	I⊽ linksi □ linksi		
			Ramiation -		
	Saabnas Bapupulmee	Andreas Exercised	Tornet Tornet Tornet Pyap.brge ppap.mid Prym_conditional	Statistical Interview Statistical Interview Spep_loge popsp_mid Perge_scale Interview Statistical Interview	Sectors Interview Sectors Interview Paper Junge poper Juniel Paper Junge poper Juniel Participation Table Soc Restarding X2A

2-11. Choose the item you need from **Object** option



2-12. Enter the text you want to show on the button

		3	23
Holmon (11) - Appendie († - Sapi - Sapi - Sapina - Sapina - Sapina	kom) Tre M Per Manual J	Channel Weighter	

2-13. Enter **Input** option and select **Up** option then type **toggle(Y0)** in Up command space

				심미
Ratics fritt Appendies John Sognal	Access [Personal Personal Legion Legion (Legion (2	V State United Communit	
Nexas and Man		Chillippe Ref _ BRiz i	EM .	

2-14. Indicator : Draw a ellipse and set width and color

Appender Minoreni Soling Hi - Iget Bate Koner La Vec T - Iget Bate Koner Vec T - Iget Bate Koner Vec T - Iget Bate Koner Soling T - Iget Bate Bate Koner Soling T - Iget Bate B	Card Rates And
B(Y] B(Q)]	DEM

2-15. Enter **Fill** option, set ON/OFF color and type the item you want to use on the indicator (ex: Y0) on the **ON color when** space

0 41			
	Apecan 15 Apecan 15 Te Strot Strot Any States States	recate) Stating + 52 Lapet State Of side side	
		82	Chuthant

2-16. The device that just established



2-17. Select File → Save As to save the file in the stated project



2-18. Click RUN icon to execute



2-19. Select Pages option to choose the page you want to execute



2-20. Execution screen



- 3. How to setup Citect communication with DVP28SV by RS-485
- 3-1. Open Citect Explorer after installation

CSV Rample - Gile	n Kapher
ile Lie+ Ionis Help	
CSV Example	
ugerlân Mylwedd Mylwedd Mylwedd Myrrk Myrrk	Carles of Y Energia Carles V Energia Carles
	Create new project
	Create new project
a la	

3-2. Enter project name and description and click **OK**

EIIII Creet Explana						1	
Do Nov Int Sch							
EN91	ान 🖆	1 1 6	1. 2		5 2 3	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
ParietLis.	Contrator	Ave Projac	;		18		
E C31 Darcos E Mill B-E Cortics Tays	ingu:	Ran: Demriytina		0		Cover Files — Clevella & Dise	
E Grans Sept Sens Sept Sens Sept Sens Sector		Location Page defici Template Template	C Cus (It) atyle manistra	par Fallin flin Ø IZ-83k - II-1	Bove		
n 🚰 Escape		Deckgown	N COLTE		B.6]		
Kondy.							10

3-3. Select the project you created on left window and enter the Communication folder

🖀 1980) - Citert Beyles	
Sile Time Innis Heip	
EN01	- 2 2 4 4 4090 2 4 1 1 1 1 1 1 1 1 1 1
Project List	Codekck of 2001
Mr Freist Source Sou	Onghies Lag Lanz Syster Concernants Chede Film Chief WBA

3-4. Select Express IO Device Setup

EN01	* 直		11 1 1 1		<u></u>		门位这世	
Project List	Constants of Con-	urorication:						
Hy Projects Cory Baseque Cory Baseque Holt Holt Holt Cory Baseque Cory Baseque Conclusion Conclusion	Eppes 10 Events Setty	IO Jecon	Eloude	Prote	S Noderos	50 Devises	10 Romoppour	

3-5. IO device setting



Select the manufacturer, model and method of Select the manufacturer, model and method of Select the Sale Sale Sale Sale Sale Sale Sale Sale Sale Sale Sale Sale Sale	Driver Address Help driver you have selected Driver Address Help Enter an address below or accept the default.
Serial (Mod bus Emary protocol)	Address: [] Selected driver Manufacturer: Modicon Model: 984
	Furness Communications Wisard
Select the COM Port	The Comute project
Select the COM Port In to use a serial protocol. The following serial detected on your system. Please choose the one you wish this NO Device to communicate through. Detected serial ports:	The Com the projec Using new 1/0 Server 'OServer'. Using Board Setting: + Memory address: 0 + 1/0 address:
Select the COM Port In to use a serial protocol. The following serial detected on your system. Please choose the one you wish this NO Device to communicate through. Detected serial ports: COM4	The Com the projec The Com the projec Using new I/O Server TOServer'. Using Board Settings: + Memory address: 0 + 1/O address: + Interrupt Using Port Settings: + Baud Refs: + Data Bits:

3-6. Follow the procedure in Sec. 2-6 to 2-20 to create new topic and setup I/O.

Appendix

р.			T	DVP address	Modbus address	Effective			
Device	Range		Type	(Hex)	(Dec)	ES/EX/SS	SA/SX/SC	EH	
s	000~255		bit	0000~00FF	000001~000256				
S	256~511		bit	0100~01FF	000247~000512	0.127	0 1024	0 1024	
S	512~767		bit	0200~02FF	000513~000768	0~127	0~1024	0~1024	
S	768~102	3	bit	0300~03FF	000769~001024				
Х	000~377		bit	0400~04FF	101025~101208	0 177	0 177	0.277	
Y	000~377		bit	0500~05FF	001281~001536	0~177	0~177	0~377	
E	000 255		bit	0600~06FF	001537~001792	0 127	0~255	0.255	
1	000~255		Word	0600~06FF	401537~401792	0~127		0~255	
М	000~255		bit	0800~08FF	002049~002304				
М	256~511 512~767 768~1023		bit	0900~09FF	002305~002560	-0~1279	0~4095		
М			bit	0A00~0AFF	002561~002816			0 4005	
М			bit	0B00~0BFF	002817~003072			0~4095	
М	1024~12	79	bit	0C00~0CFF	003073~003328				
М	1280~153	35	bit	0D00~0DFF	003329~003584				
М	1536~17	91	bit	B000~B0FF	045057~045312		0~4095		
М	1792~204	47	bit	B100~B1FF	045313~045568	1			
М	2048~230	03	bit	B200~B2FF	045569~045824				
М	2304~25	59	bit	B300~B3FF	045825~046080				
М	2560~28	15	bit	B400~B4FF	046081~046636	0.1270		0 4005	
М	2816~30	71	bit	B500~B5FF	046637~046592	0~1279		0~4095	
М	3072~332	27	bit	B600~B6FF	046593~046848				
М	3328~35	83	bit	B700~B7FF	046849~047104				
М	3584~38	39	bit	B800~B8FF	047105~047360				
М	3840~40	95	bit	B900~B9FF	046361~047616				
	0~	1 C h 4	bit	0E00~0EC7	003585~003784	0 127	0 100	0 100	
C	199	10-01t	Word	0E00~0EC7	403585~403784	-0~127	0~199	0~199	
C	200 255	20 1.24	bit	0EC8~0EFF	003785~003840	020 055	200 255	200 255	
	200~255 32-bit		Dword	0EC8~0EFF	403785~403840	-232~255	200~255	200~255	

Modbus address table of Delta DVP series PLC.

Davias	Danga	Tumo	DVP address Modbus address		Effective			
Device	Kange	Type	(Hex)	(Dec)	ES/EX/SS	SA/SX/SC	EH	
D	000~255	Word	1000~10FF	404097~404352				
D	256~511	Word	1100~11FF	404353~404608				
D	512~767	Word	1200~12FF	404609~404864				
D	768~1023	Word	1300~13FF	404865~405120				
D	1024~1279	Word	1400~14FF	405121~405376		0 4000		
D	1280~1535	Word	1500~15FF	405377~405632				
D	1536~1791	Word	1600~16FF	405633~405888	0~1311		0,0000	
D	1792~2047	Word	1700~17FF	405889~406144		0~4999	0~99999	
D	2048~2303	Word	1800~18FF	406145~406400				
D	2304~2559	Word	1900~19FF	406401~406656				
D	2560~2815	Word	1A00~1AFF	406657~406912				
D	2816~3071	Word	1B00~1BFF	406913~407168				
D	3072~3327	Word	1C00~1CFF	407169~407424				
D	3328~3583	Word	1D00~1DFF	407425~407680				
D	3584~3839	Word	1E00~1EFF	407681~407936				
D	3840~4095	Word	1F00~1FFF	407937~408912				
D	4096~4351	Word	9000~90FF	408913~409168				
D	4352~4607	Word	9100~91FF	436865~437120				
D	4608~4863	Word	9200~92FF	437121~437376				
D	4864~5119	Word	9300~93FF	437377~437632				
D	5120~5375	Word	9400~94FF	437633~437888	0 1211	0 4000	0,0000	
D	5376~5631	Word	9500~95FF	437889~438144	0~1311	0~4999	0~99999	
D	5632~5887	Word	9600~96FF	438145~438400				
D	5888~6143	Word	9700~97FF	438401~438656				
D	6144~6399	Word	9800~98FF	438657~438912				
D	6400~6655	Word	9900~99FF	438913~439168				
D	6656~6911	Word	9A00~9AFF	439169~439424				
D	6912~7167	Word	9B00~9BFF	439425~439680				

Davias	Danas	T	DVP address Modbus address		Effective			
Device	Kange	Type	(Hex)	(Dec)	ES/EX/SS	SA/SX/SC	EH	
D	7168~7423	Word	9C00~9CFF	439937~440192				
D	7424~7679	Word	9D00~9DFF	440193~440448				
D	7680~7935	Word	9E00~9EFF	440449~440704		0, 4000		
D	7936~8191	Word	9F00~9FFF	440705~440960				
D	8192~8447	Word	A000~A0FF	440961~441216				
D	8448~8703	Word	A100~A1FF	441217~441472	0 1211		0,0000	
D	8704~8959	Word	A200~A2FF	441473~441728	0~1311	0~4999	0~9999	
D	8960~9125	Word	A300~A3FF	441729~441984				
D	9126~9471	Word	A400~A4FF	441985~442240	1			
D	9472~9727	Word	A500~A5FF	442241~442496				
D	9728~9983	Word	A600~A6FF	442497~442752				
D	9984~99999	Word	A700~A70F	442753~443008				