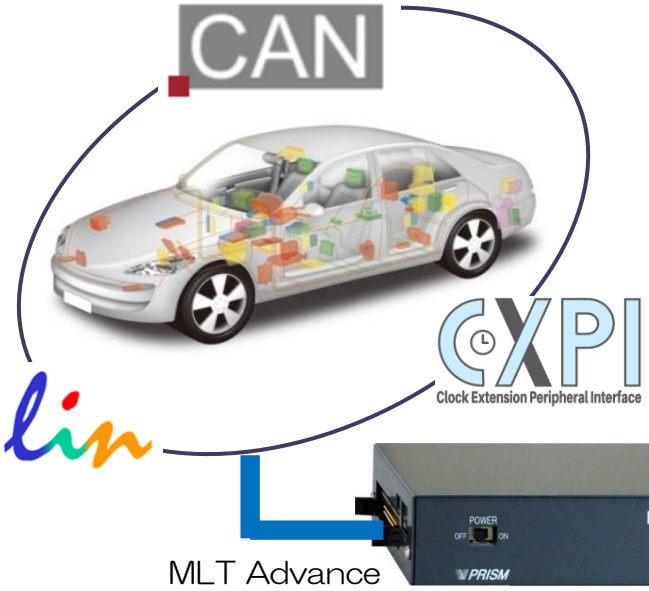
Multi function simulator for Multi LAN Tester

M P S

Multi Protocol Simulator



- Support for CAN FD • CAN / LIN / CXPI communication
  (Customizable for other communication)
- Working cooperation with Navigator, and the simulation is possible while performing communication logging.
- Support for the stand-alone operation also.
- Define the BitAssign data and control by the data unit.
- Communication that requires time accuracy (periodic transmission) instructs to MLT Hardware.
- Displaying the value of data which wants to monitor in real time.

Development environment

The list price is the price when purchased in Japan.
Please contact us if you are purchasing from overseas.

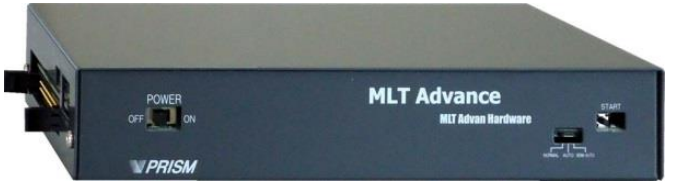
MPS

CAN CAN FD	MPS-C ¥276,000JPY/1 license※
LIN	MPS-L ¥276,000JPY/1 license※
CXPI	MPS-CX Basic function ¥276,000JPY/1 license※ Optional function (MPS-CX-OP-CONF) 1. Bus corruption 2. Error frame sending 3. Clock width variable ＋ JASO Conformance test (Data link phase) Sample panel ¥1,104,000JPY/1 license※

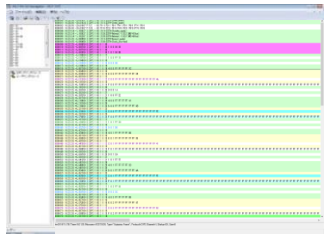
※Those licenses are renewed every year.
(The cost of renewal: 30% of the license acquisition cost)

Multi LAN Tester (Sold separately)

MLT Advance



< included >
MLT Navigator



¥398,000JPY ～
Depends on the protocol

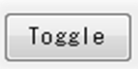
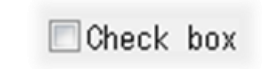
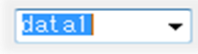
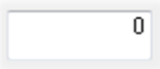
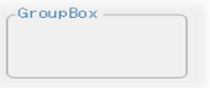
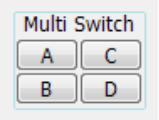
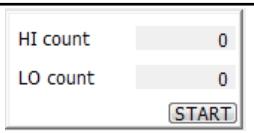
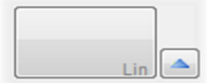
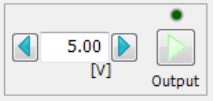
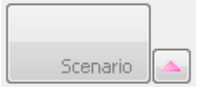
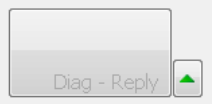
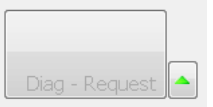
Operation environment

Operating system	Windows 10 (32/64bit)
CPU	Core i5 or higher
Main memory	2GB or more (3GB or more is recommended.)
Hard disk free space	5GB or more
Disk device	HDD 5200rpm (320GB or more is recommended.)
Display	A resolution of 1366×768 or higher are recommended.
Others	MLT Advance

PRISM

Easy to use GUI (ActiveX control)

- Prepare many controls of Button, LED, Data Counter, Switch, Digital control and so on.
- Operation and display in conjunction with the bit assign data is possible.

Label Image	-	Free input	Toggle Button	Tx/Rx		Check Box	Tx/Rx	
Combo Box	Tx/Rx		List Box	Tx/Rx		Text	Tx/Rx	
Button	Tx		Group Box	-		3-point Switch	Tx	
Meter	Rx		Switch	Tx/Rx		LED	Rx	
Multi Switch	Tx		Port Input Monitoring	Rx		Trigger Output Setup	Tx	
Data Counter	Rx		Digital	Rx		Combo Slider	Tx/Rx	
Special Function	Tx		Pattern	Tx		Operation of stabilized Power Supply	Tx	
Scenario Operation	Tx		Diagnostics (Response)	Rx		Diagnostics (Request)	Tx	

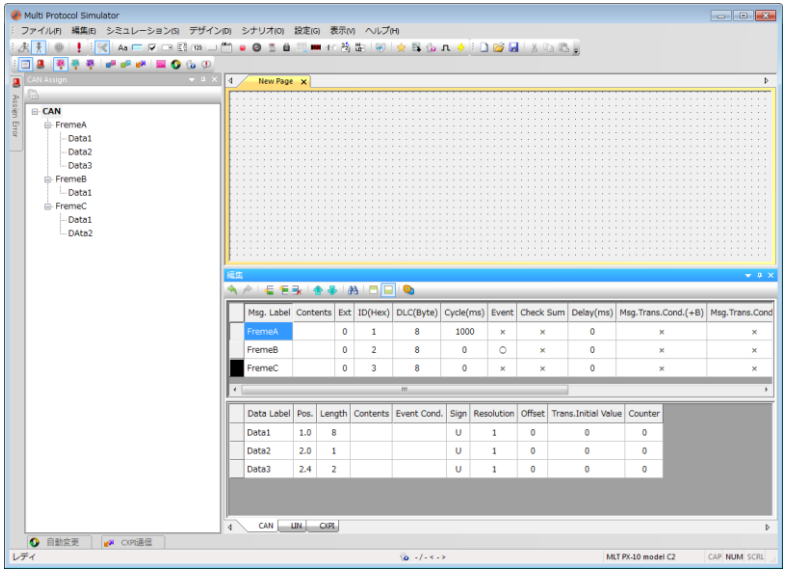
PRISM

Creation of Simulation File

■ Editing of Bit Assign Data

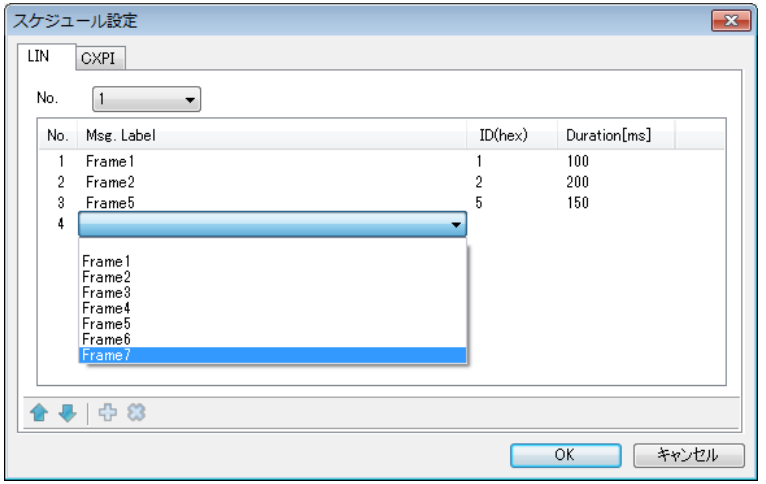
- Equipped with BitAssign data editing function.
- Saving only BitAssign data to file and reading.
- By associating frame names and data names, it is possible to construct a simulation environment that is easy to analyze.

	Frame information	Data information
CAN	Msg.Label Frame type ID DLC Transmission cycle Support of event-driven transmission Support of check sum Delay Msg.Trans.Cond Specify the position of CheckSum	Data Label Bit position data length Sign resolution Offset counter Initial value of transmission
LIN	Msg.Label ID Parity DLC Type of check sum Delay Msg.Trans.Cond	Data Label Bit position data length Sign Initial value of transmission
CXPI	Msg.Label ID DLC Wakeup Sleep Counter Burst Event Retry Delay Msg.Trans.Cond	Data Label Bit position data length Sign Initial value of transmission



■ Schedule Settings (LIN/CXPI)

- 20 types of schedule table can be set (valid in master mode).
- Msg.Label and ID refer to the frame information defined to BitAssign data.



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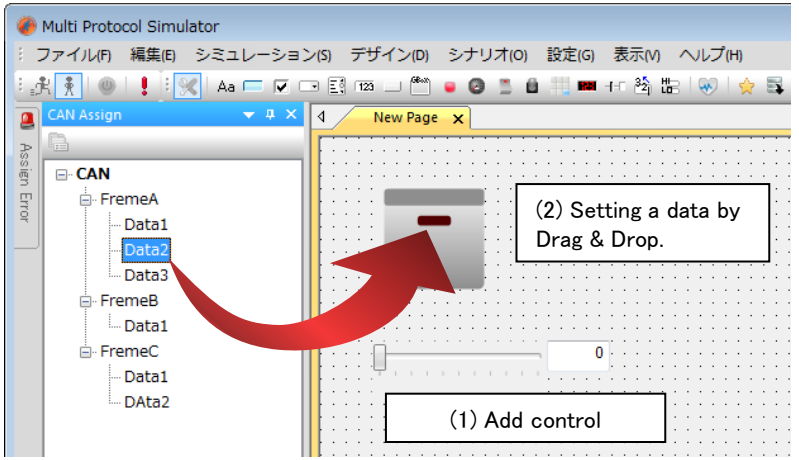
Creation of Simulation File

■ Association of BitAssign Data

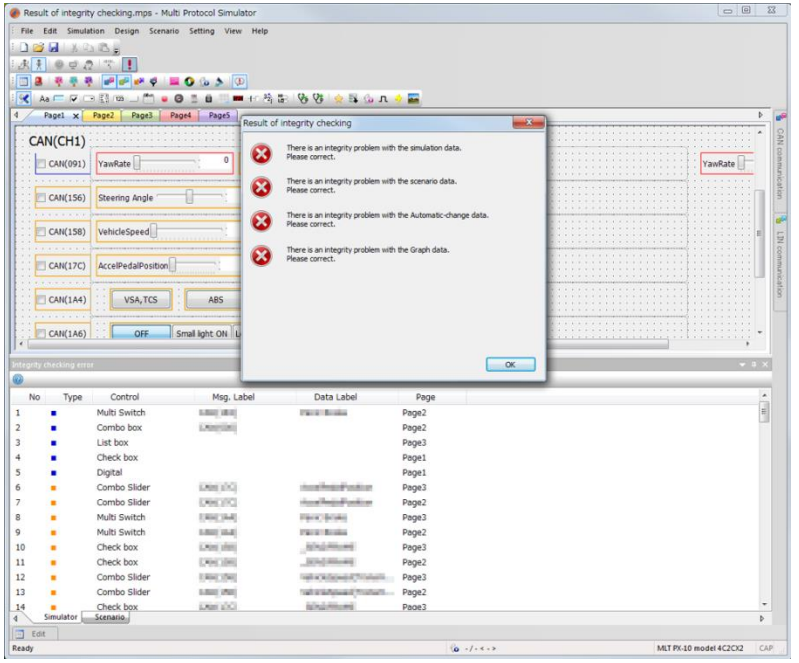
- Displaying frame names and data names of defined BitAssign in tree view.
- Easy setting which just dragging the data name to use and dropping it on the control you want to set.



■ Integrity Checking

- Perform integrity checking before simulation is performed.
- The execution timing are two ways when the integrity checking button is pressed down and when the simulation start button is pressed.
- Result of integrity checking display error contents and information on the corresponding control.

Result of integrity checking	If a control with unmatched settings is detected, a warning message which detected screen each is displayed.
Integrity checking error	Display the error level, the name of the target page and the applicable control information etc.
Panel (control)	The applicable control is enclosed with a colored frame.

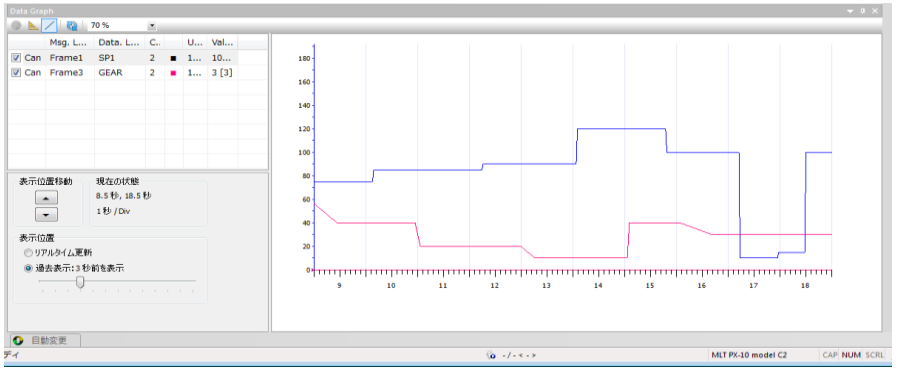


PRISM

Transmit / reception data real time display function

■ Graph display function (reception data only)

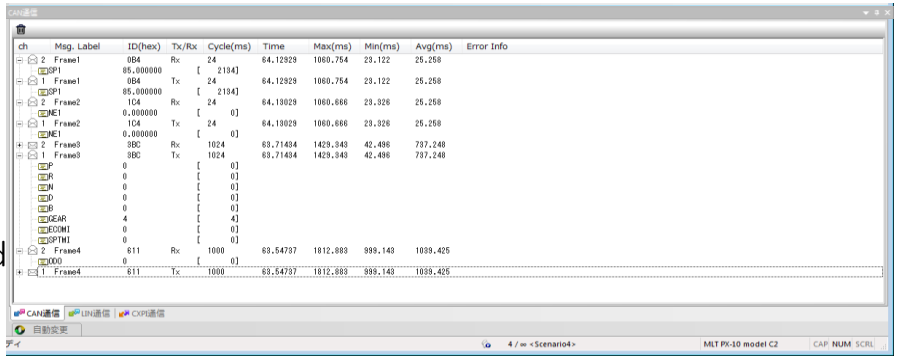
- Up to 10 set of received data can be displayed.
- The display setting is simple operation just by dragging and dropping from the BitAssign data screen to the graph display screen.



<Data Graph screen>

■ Communication data display function by each protocol

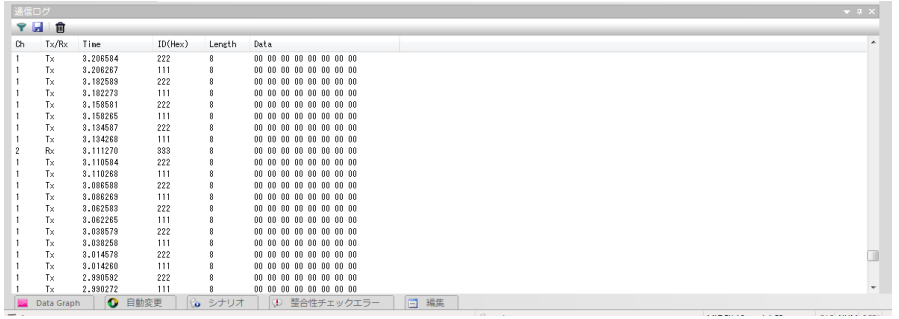
- During communication, all transmitted and received data on the bus is displayed for each protocol.
- If data not set in the control is also registered in the BitAssign, the transmission / reception value is displayed.
- The maximum, minimum and average values of the transmission / reception interval of each frame are displayed
- Physical values and raw values considering “Resolution”, “Offset”, ” Sign” of bit assign data are displayed.



<Communication data display screen>

■ Communication log data recording function (CAN)

- Displaying transmission / reception data which specified channel and frame ID.
- File saving in the CSV format is possible.



<Communication log screen>

PRISM

Gateway function

■ Automatic change function (CAN/LIN/CXPI)

- Automatically change the transmission value of the control when a specific value is received.
- It is possible to change the transmission value of more than one control for one reception condition.
- It is also possible to change the transmission value by calculation.

■ Response transmission function (CAN/LIN)

- Automatically send a specified frame every time a specified data or a frame of a specified pattern are received.
- Since processing is executed by hardware, it can respond within 1ms.

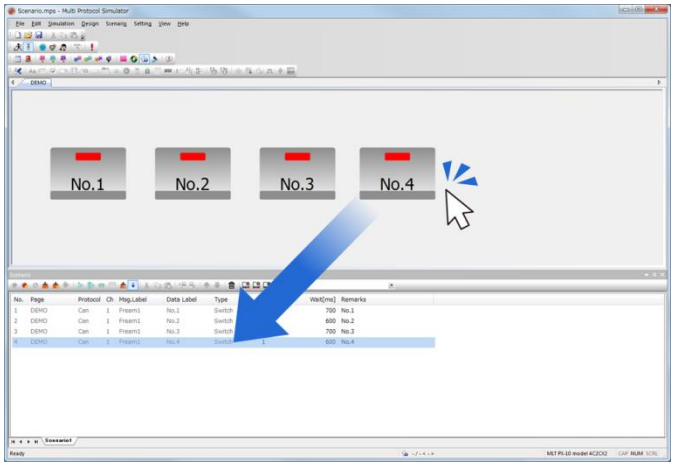
	Automatic change	Response transmission
Processing method	Software	Hardware
Transmission of the fixed value	possible	possible
Transmission of the calculation value	possible	impossible
Maximum number of settings	none *1	50 cases(CAN) / 100 cases(LIN)
Updating the control display	updated	Not update
Setting contents	Rx : reception frame / reception data / received value Tx : transmission control	Rx : response condition Tx : transmission frame
Setting targets	one to many	one to one
The control settings on page	required *2	possible even without the control

*1 Depends on PC performance.
*2 It is necessary to set the control name in a target control.

Automatic inspection function

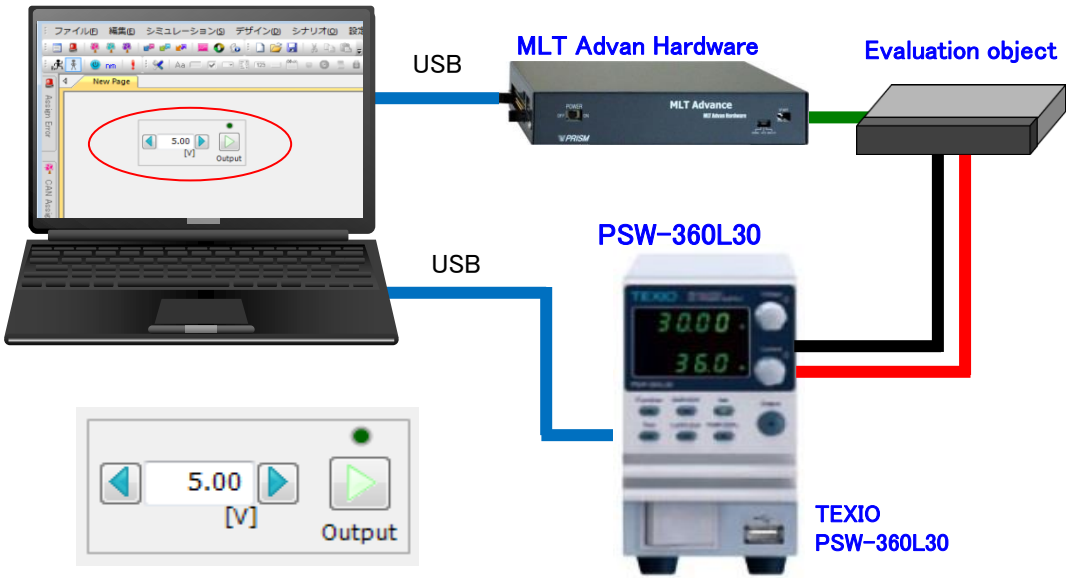
■ Scenario function

- This function enables to memorize manual operations in order and replay them.
- Number of executions: 1 to 65535 times or unlimited setting are possible.
- By combining multiple scenario data, complicated inspection patterns can be easily created.
- High quality inspection is realized without depending on operator skills.



■ Operation of Stabilization Power Supply

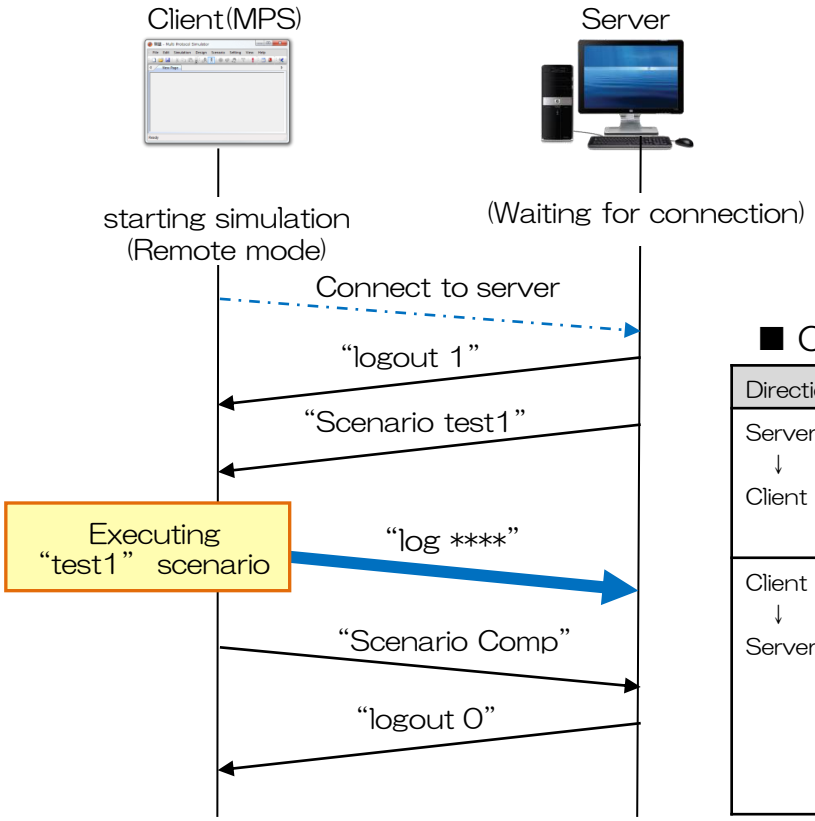
- Support voltage value control of DC stabilized power supply.
  Applicable model : TEXIO PSW-360L30
- A output voltage value, a constant current (CC) and a voltage changing step value can be set.
- By using it with the scenario function, it is possible to automate inspection including the power supply fluctuation.



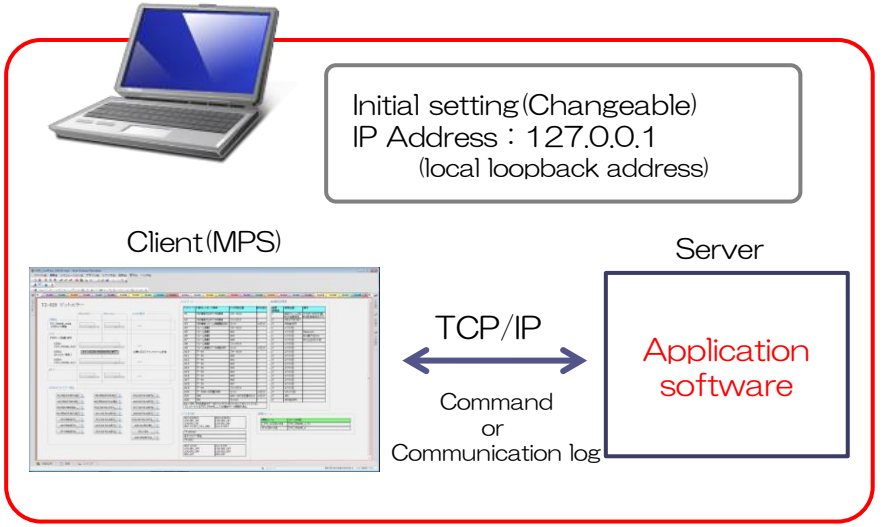
Automatic inspection function

■ Remote control function

- Connect MPS and the server application via TCP/IP, and execute the specified scenario from the server application.
- Automatic inspection can be realized by acquiring communication log data.



【Example of control flow】



【Configuration diagram of Remote mode】

■ Communication command

Direction	Command	Identifier	Parameter1	Parameter2	Example
Server ↓ Client	Scenario execution	“Scenario ”	Scenario name	(none)	Scenario¥t0¥tTest1¥n
	Log output instruction	“logout”	Output flag (0 or 1)	(none)	logout¥t1¥n
Client ↓ Server	Log	“log”	Log information	(none)	(*1)
	Scenario execution complete	“Scenario Comp”	(none)	(none)	ScenarioComp¥n
	Scenario execution failure	“Scenario NG”	Scenario name	Cause (1 or 2)	ScenarioNG¥tTest1¥t1¥n

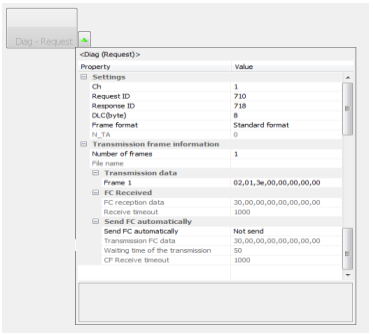
※ Customer should prepare the server application.
Please contact us when you can not prepare.

PRISM

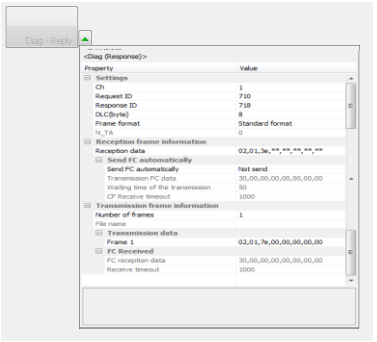
Enhanced functions

■ Diagnostics request / response function

- Support both single-frame and multi-frame, and the transmission data can be set not only on the control but also in an external files (text format and binary format).
- By using it with the scenario function, it is possible to automate inspection including diagnosis.



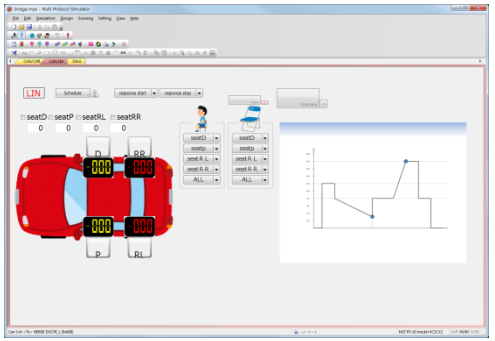
<Request Settings screen>



<Response Settings screen >

■ Using images

- Inserting images, tables and descriptions can be easily added.
- Supported format are PNG / BMP / JPEG / GIF.
- By adding figures, descriptions, tables, etc., it is possible to summarize operating procedures, commentary, etc. on the MPS page.



Product customization is possible. Please inquire in detail.