JY997D35801F

				PRECAUTIONS	
	ORI2I	Chan	ges for the Better	 Be sure to shut off all phas before mounting or removing 	es of the external power supply used by the system
GT01-RS4-	М			Not doing so can cause the	unit to fail or malfunction.
Serial Multi-	Drop Co	onnection	Unit	 When installing the battery w The static electricity can cau 	vear an earth band etc. to avoid the static electricity. use the unit to fail or malfunction.
	l	JSER'S	MANUAL	MOUNTING PRECAUTIONS	
GOTio		Manual Number	JY997D35801E	Use the Multi-Drop Connect	tion Unit in the environment that satisfies the general
		Date	Jul. 2011	fire, malfunction or product d	damage or deterioration.
This manual describes	the encoificati	one of the product	Refere use read this		
manual and manuals handling and operatin	of relevant product	products fully to a t. Make sure to I	acquire proficiency in learn all the product	WIRING PRECAUTIONS	
information, safety info	rmation, and pr	recautions.	take it out and read it	 Be sure to shut off all phase before wiring. Failure to do s 	es of the external power supply used by the system
whenever necessary. A	Always forward	it to the end user.	take it out and read it	malfunctions.	
Registration The company name ar	nd the product	name to be describ	bed in this manual are	 Please make sure to ground supply section by applying 1 doing so may cause an elect 	Of or less which is used exclusively for the GOT. Not tric shock or malfunction.
Effective Jul 2011		iks of each company	iy.	· Correctly wire the Multi-D	prop Connection Unit power supply section after
Specifications are subj	ect to change v	without notice.		so can cause a fire or failure	and terminal arrangement of the product. Not doing
		© 2009 Mitsubishi	i Electric Corporation	Tighten the terminal screw section in the specified torque	s of the Multi-Drop Connection Unit power supply a range. Undertightening can cause a short circuit or
Safety Precauti	ion (Read the	ese precautions befo	ore using.)	Overtightening can cause a	short circuit or malfunction due to the damage of the
Before using this produ	ict, please rea	d this manual and	I the relevant manuals	 screws or the Multi-Drop Col Exercise care to avoid foreign 	nnection Unit.
produced in this manual product correctly.	al carefully and	pay full attention	to safety to handle the	Multi-Drop Connection Unit.	Not doing so can cause a fire, failure or malfunction.
The precautions given in this manual, the safety	this manual ar	e concerned with the	his product. GER" and "CAUTION"		•
	ndiaataa that is			WIRING PRECAUTIONS	
	conditions, resu	Iting in death or sev	vere injury.	 Plug the communication can tighten the mounting and term 	able into the connector of the connected unit and
					minal sciews in the specified torque range.
	ndicates that ir	ncorrect handling n	nay cause hazardous	Undertightening can cause	a short circuit or malfunction. Overtightening can
	ndicates that in conditions, result or physical dam	ncorrect handling n ulting in medium or age.	nay cause hazardous slight personal injury	Undertightening can cause cause a short circuit or malfu	e a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit.
CAUTION Conception of circumsta	ndicates that in conditions, result or physical dam ances, procedu	ncorrect handling n ulting in medium or age. res indicated by "C	nay cause hazardous slight personal injury CAUTION" may also be	Undertightening can cause cause a short circuit or malfu	a a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit.
CAUTION Compending on circumstatinked to serious results.	ndicates that in conditions, resu or physical dam ances, procedu	ncorrect handling n ulting in medium or lage. res indicated by "C	nay cause hazardous slight personal injury CAUTION" may also be	Undertightening can cause cause a short circuit or malfu STARTUP/MAINTENANCE PRECAUTIONS	a a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit.
CAUTION In Concernment of the serious results.	ndicates that in conditions, result or physical dam ances, procedu nt to follow the	ncorrect handling n Ilting in medium or lage. res indicated by "C directions for usage	nay cause hazardous slight personal injury CAUTION" may also be e.	Undertightening cain cause cause a short circuit or malfi STARTUP/MAINTENANCE PRECAUTIONS • Do not disassemble or modil Doing so can cause a failure	a a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit. CAUTION fy the Multi-Drop Connection Unit. , malfunction, injury or fire.
CAUTION	ndicates that in conditions, resu- or physical dam ances, procedu nt to follow the AS ()D/	ncorrect handling n ulting in medium or lage. res indicated by "C directions for usage ANGER	nay cause hazardous slight personal injury CAUTION" may also be e.	Undertightening can cause cause a short circuit or malfit Cause a short circuit or malfit PRECAUTIONS • Do not disassemble or modil Doing so can cause a failure • Do not touch the conductiv Unit directly.	a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit. CAUTION fy the Multi-Drop Connection Unit. , malfunction, injury or fire. e and electronic parts of the Multi-Drop Connection
CAUTION Depending on circumsta inked to serious results. n any case, it is importan DESIGN PRECAUTION • Some failures of th	ndicates that in conditions, resu- or physical dam ances, procedu nt to follow the as Multi-Drop (Incorrect handling n ulting in medium or age. res indicated by "C directions for usage ANGER Connection Unit or	nay cause hazardous slight personal injury CAUTION" may also be e. r cable may keep the	Undertightening can cause cause a short circuit or malf. STARTUP/MAINTENANCE PRECAUTIONS • Do not disassemble or modil Doing so can cause a failure • Do not touch the conductiv Unit directly. Doing so can cause a Multi-	a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit. CAUTION fy the Multi-Drop Connection Unit. , malfunction, injury or fire. e and electronic parts of the Multi-Drop Connection Drop Connection Unit malfunction or failure.
CAUTION Depending on circumsta inked to serious results. In any case, it is importan DESIGN PRECAUTION • Some failures of th outputs on or off. An external monitori	ndicates that in conditions, resu or physical dam ances, procedu nt to follow the s	ncorrect handling n ulting in medium or age. res indicated by "C directions for usage ANGER Connection Unit or Id be provided to cl	nay cause hazardous slight personal injury CAUTION" may also be e. • cable may keep the heck for output signals	Undertightening can cause cause a short circuit or malfi EXARTUP/MAINTENANCE PRECAUTIONS • Do not disassemble or modil Doing so can cause a failure • Do not touch the conductiv Unit directly. Doing so can cause a Multi-I • The cables connected to the clamped.	a a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit. CAUTION fy the Multi-Drop Connection Unit. and electronic parts of the Multi-Drop Connection Drop Connection Unit malfunction or failure. e Multi-Drop Connection Unit must be run in ducts or
CAUTION Cepending on circumsta inked to serious results. In any case, it is importan DESIGN PRECAUTION Some failures of th outputs on or off. An external monitority which may lead to a Not doing so can car	ndicates that in conditions, resu or physical dam inces, procedu int to follow the the Multi-Drop (ing circuit shou serious acciden sea an acciden	ncorrect handling n ulting in medium or age. res indicated by "C directions for usage ANGER Connection Unit or Id be provided to cl nt. t due to faise output	nay cause hazardous slight personal injury CAUTION" may also be e. • cable may keep the heck for output signals t or malfunction	Undertightening can cause cause a short circuit or malfi EXERCINTIONS • Do not disassemble or modil Doing so can cause a failure • Do not touch the conductiv Unit directly. Doing so can cause a Multi-1 • The cables connected to the clamped. Not doing so can cause the due to the dangline, motior	a a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit. CAUTION fy the Multi-Drop Connection Unit. , malfunction, injury or fire. e and electronic parts of the Multi-Drop Connection Drop Connection Unit malfunction or failure. Multi-Drop Connection Unit must be run in ducts or Multi-Drop Connection Unit or cable to be damaged or accidental pulling of the cables or can cause a
CAUTION Depending on circumsta inked to serious results. n any case, it is importan DESIGN PRECAUTION • Some failures of th outputs on or off. An external monitorin which may lead to a Not doing so can cau • If a communication	ndicates that in conditions, resu- or physical dam inces, procedu int to follow the the Multi-Drop (ing circuit shou serious acciden in fault (includi	ncorrect handling n ulting in medium or age. res indicated by "C directions for usage ANGER Connection Unit or Id be provided to cl nt. t due to false outpu ng cable disconn	nay cause hazardous slight personal injury CAUTION" may also be e. • cable may keep the heck for output signals t or malfunction. ection) occurs during	Undertightening can cause cause a short circuit or malfi EXERCIDENTIONS • Do not disassemble or modil Doing so can cause a failure • Do not touch the conductiv Unit directly. Doing so can cause a Multi-1 • The cables connected to the clamped. Not doing so can cause the due to the dangling, motior malfunction due to a cable or	a a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit. CAUTION fy the Multi-Drop Connection Unit. , malfunction, injury or fire. e and electronic parts of the Multi-Drop Connection Drop Connection Unit malfunction or failure. e Multi-Drop Connection Unit must be run in ducts or Multi-Drop Connection Unit or cable to be damaged or a accidental pulling of the cables or can cause a onnection fault.
CAUTION Cepending on circumsta inked to serious results. In any case, it is importan DESIGN PRECAUTION Some failures of th outputs on or off. An external monitorin which may lead to a Not doing so can cau. If a communication monitoring on the G suspended and the C	ndicates that in or physical dam ances, procedu nt to follow the us () () () e Multi-Drop () ng circuit shou serious acciden fault (includi OT, communic GOT becomes	ncorrect handling n ulting in medium or age. res indicated by "C directions for usage ANGER Connection Unit or Id be provided to cl nt. t due to false outpu ng cable disconn- ation between the inoperative.	nay cause hazardous slight personal injury CAUTION" may also be e. • cable may keep the heck for output signals t or malfunction. ection) occurs during GOT and PLC CPU is	Undertightening can cause cause a short circuit or malfi EXERCINTIONS • Do not disassemble or modil Doing so can cause a failure • Do not touch the conductiv Unit directly. Doing so can cause a Multi-1 • The cables connected to the clamped. Not doing so can cause the due to the dangling, motior malfunction due to a cable c • When unplugging the cable portion. Doing so can cause	a a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit. CAUTION fy the Multi-Drop Connection Unit. , malfunction, injury or fire. e and electronic parts of the Multi-Drop Connection Drop Connection Unit malfunction or failure. e Multi-Drop Connection Unit must be run in ducts or Multi-Drop Connection Unit or cable to be damaged or accidental pulling of the cables or can cause a onnection fault. connected to the unit, do not hold and pull the cables to the unit or cable to be damaged or can cause a
CAUTION Caution Construct a series of the series of the series results. In any case, it is important DESIGN PRECAUTION Some failures of th outputs on or off. An external monitoring which may lead to a Not doing so can cau If a communication monitoring on the G suspended and the C A system where th significant operation	ndicates that in conditions, result or physical dam ances, procedu nt to follow the us () () () () () () () ()	ncorrect handling n ulting in medium or age. res indicated by "C directions for usage ANGER Connection Unit or Id be provided to cl nt. t due to false outpu ng cable disconn- ation between the inoperative. d should be config.	nay cause hazardous slight personal injury CAUTION" may also be e. Cable may keep the heck for output signals to malfunction. ection) occurs during GOT and PLC CPU is gured to perform any ches of a device other	Undertightening can cause cause a short circuit or malfi EXERCIP/MAINTENANCE PRECAUTIONS • Do not disassemble or modil Doing so can cause a failure • Do not touch the conductiv Unit directly. Doing so can cause a Multi-1 • The cables connected to the clamped. Not doing so can cause the due to the dangling, motior malfunction due to a cable c • When unplugging the cable portion. Doing so can cause malfunction due to a cable c	a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit. CAUTION fy the Multi-Drop Connection Unit. , malfunction, injury or fire. e and electronic parts of the Multi-Drop Connection Drop Connection Unit malfunction or failure. e Multi-Drop Connection Unit must be run in ducts or Multi-Drop Connection Unit or cable to be damaged or accidental pulling of the cables or can cause a onnection fault. connected to the unit, do not hold and pull the cable so the the unit or cable to be damaged or can cause a onnection fault. next to the battery.
CAUTION Caution Comparison Compari	ndicates that in conditions, result or physical dam ances, procedu nt to follow the us () e Multi-Drop () ng circuit shou serious acciden fault (includi OT, communic GOT becomes e GOT is use to to the system assumption th	ncorrect handling n ulting in medium or age. res indicated by "C directions for usage ANGER Connection Unit or Id be provided to cl nt. t due to false outpung cable disconn- ation between the inoperative. d should be config to by using the switt at a GOT community.	nay cause hazardous slight personal injury CAUTION" may also be e. Cable may keep the heck for output signals tor malfunction. ection) occurs during GOT and PLC CPU is gured to perform any ches of a device other cation fault will occur.	Undertightening can cause cause a short circuit or malfi EXERCIP/MAINTENANCE PRECAUTIONS • Do not disassemble or modil Doing so can cause a failure • Do not touch the conductiv Unit directly. Doing so can cause a Multi-1 • The cables connected to the clamped. Not doing so can cause the due to the dangling, motior malfunction due to a cable c • When unplugging the cable portion. Doing so can caus malfunction due to a cable c • Do not drop or apply any img If any impact has been applin The the combet of the combet o	a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit. CAUTION fy the Multi-Drop Connection Unit. , , malfunction, injury or fire. e e and electronic parts of the Multi-Drop Connection Drop Connection Unit malfunction or failure. e Multi-Drop Connection Unit must be run in ducts or Multi-Drop Connection Unit or cable to be damaged or can cause a onnection fault. connected to the unit, do not hold and pull the cable se the unit or cable to be tharmaged or can cause a onnection fault. eather the battery, and never use it.
CAUTION Caution Comparison Compari	ndicates that in conditions, result or physical dam ances, procedu nt to follow the us () () () () () () () ()	ncorrect handling n ulting in medium or age. res indicated by "C directions for usage ANGER Connection Unit or Id be provided to cl nt. t due to false outpu ng cable disconne ation between the inoperative. d should be config to by using the switt at a GOT communi t due to false outpu tion Unit as the we	nay cause hazardous slight personal injury CAUTION" may also be e. Cable may keep the heck for output signals to malfunction. ection) occurs during GOT and PLC CPU is gured to perform any cheso fa device other rection fault will occur. to malfunction.	Undertightening căn cause cause a short circuit or malfi EXERCIP/MAINTENANCE PRECAUTIONS • Do not disassemble or modil Doing so can cause a failure • Do not touch the conductiv Unit directly. Doing so can cause a Multi-I • The cables connected to the clamped. Not doing so can cause the due to the dangling, motior malfunction due to a cable c portion. Doing so can caus malfunction due to a cable c • When unplugging the cable portion. Doing so can caus malfunction due to a cable c • Do not drop or apply any img If any impact has been appli The battery may be damage	a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit. CAUTION fy the Multi-Drop Connection Unit. , malfunction, injury or fire. e and electronic parts of the Multi-Drop Connection Drop Connection Unit malfunction or failure. e Multi-Drop Connection Unit must be run in ducts or Multi-Drop Connection Unit or cable to be damaged or accidental pulling of the cables or can cause a onnection fault. connected to the unit, do not hold and pull the cable se the unit or cable to be damaged or can cause a onnection fault. connected to the battery, ed, discard the battery and never use it. d by the drop or impact. ways fouch grounded metal, etc. to discharge static
CAUTION Caution Construct on the series of the series of the series results. In any case, it is important DESIGN PRECAUTION Some failures of th outputs on or off. An external monitoring which may lead to a Not doing so can cat If a communication monitoring on the G suspended and the C A system where th significant operation that the GOT on the Not doing so can cat Ob on ou use the Mult cause a serious accid An independent and	ndicates that in conditions, resu- or physical dam ances, procedu nt to follow the ts () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () ()	ncorrect handling n ulting in medium or age. res indicated by "C directions for usage ANGER Connection Unit or Id be provided to cl nt. t due to false outpu ng cable disconne ation betwen the inoperative. d should be config to by using the switt at a GOT communi t due to false outpu tion Unit as the we ware or mechanical	nay cause hazardous slight personal injury CAUTION" may also be e. Cable may keep the heck for output signals tor malfunction. ection) occurs during GOT and PLC CPU is gured to perform any cheso fa device other reation fault will occur. tor malfunction. arning device that may I interlock is required to	Undertightening căn cause cause a short circuit or malfi Exact a short circuit or malfi Doing so can cause a failure Do not touch the conductiv Unit directly. Doing so can cause a Multi-I • The cables connected to the clamped. Not doing so can cause the due to the dangling, motior malfunction due to a cable c • When unplugging the cable portion. Doing so can cause malfunction due to a cable c • Do not drop or apply any imp if any impact has been appli The battery may be damage Before touching the unit, al electricity from human body. Not doing so can cause the i	a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit. CAUTION fy the Multi-Drop Connection Unit. , , malfunction, injury or fire. e e and electronic parts of the Multi-Drop Connection program Drop Connection Unit malfunction or failure. e Multi-Drop Connection Unit must be run in ducts or fmillibrop Connection Unit or cable to be damaged or can cause a onnection fault. connected to the unit, do not hold and pull the cable se the unit or cable to be damaged or can cause a onnection fault. fmillibrop Connection Unit or cable to be damaged or can cause a onnection fault. eact to the battery. ed, discard the battery and never use it. d by the drop or impact. ways touch grounded metal, etc. to discharge static etc. Multi-Drop Connection Unit to fail malfunction.
CAUTION Construction Constend Construction Construction Constructi	ndicates that in conditions, resu- or physical dam ances, procedu nt to follow the use an acciden gerious accide use an acciden GOT becomes e GOT is use- to the system assumption th use an acciden in fault (includi OT, communic SOT becomes e GOT is use- to the system in assumption th use an acciden in four comment of a second the system in the system in the system is assumption th use an accident in the system is not comment is instruction r	Incorrect handling n rage. The indicated by "C directions for usage ANGER Connection Unit or Id be provided to cl nt. t due to false outpuing cable disconnation between the inoperative. d should be config t due to false outpuing t a GOT communi t due to false outpuing t due to false series we ware or mechanical d outputs serious we	ray cause hazardous sight personal injury CAUTION" may also be e. cable may keep the heck for output signals tor malfunction. ection) occurs during GOT and PLC CPU is gured to perform any ches of a device other cation fault will occur. arming device that may l interlock is required to arming.	Undertightening căn cause cause a short circuit or malfi Exact a short circuit or malfi Doing so can cause a failure Do not touch the conductiv Unit directly. Doing so can cause a Multi-I • The cables connected to the clamped. Not doing so can cause the due to the dangling, motior malfunction due to a cable c • When unplugging the cable portion. Doing so can cause malfunction due to a cable c • Do not drop or apply any imj if any impact has been appli The battery may be damage • Before touching the unit, al electricity from human body. Not doing so can cause the l	 a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit. CAUTION fy the Multi-Drop Connection Unit. malfunction, injury or fire. and electronic parts of the Multi-Drop Connection Drop Connection Unit malfunction or failure. Multi-Drop Connection Unit must be run in ducts or Multi-Drop Connection Unit or cable to be damaged or can cause a onnection fault. connected to the unit, do not hold and pull the cable is the unit or cable to be damaged or can cause a onnection fault. act to the battery, ed, discard the battery and never use it. d by the drop or impact. ways touch grounded metal, etc. to discharge static etc. Multi-Drop Connection Unit to fail malfunction.
CAUTION C	ndicates that in conditions, resu- or physical dam ances, procedu nt to follow the IS () () () e Multi-Drop () ng circuit shou serious acciden a fault (includi OT, communic GOT becomes e GOT is use n acciden to the system assumption th use an acciden ti-Drop Connec fent.	ncorrect handling n alting in medium or age. The indicated by "C directions for usage ANGER Connection Unit or Id be provided to cl nt. t due to false outpu ng cable disconny ation between the inoperative. d should be config d should be config t due to false outpu tion Unit as the wat ware or mechanical d outputs serious w may result in an ac	ay cause hazardous slight personal injury CAUTION" may also be e. cable may keep the heck for output signals t or malfunction. ection) occurs during GOT and PLC CPU is gured to perform any ches of a device other cation fault will occur. t or malfunction. arming device that may l interlock is required to arming. cident due to incorrect	Undertightening căn cause cause a short circuit or malfi Exact a short circuit or malfi Doing so can cause a failure Do not tisassemble or modil Doing so can cause a failure Doing so can cause a Multi- The cables connected to the clamped. Not doing so can cause the due to the dangine, motior malfunction due to a cable c Und drop or apply any imp if any impact has been appli The battery may be damage Before touching the unit, al electricity from human body, Not doing so can cause the I	a a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit.
CAUTION Caution Caution Construct a series of the series of the series results. In any case, it is important DESIGN PRECAUTION Some failures of the outputs on or off. An external monitorin which may lead to a Not doing so can cat. If a communication monitoring on the G suspended and the G A system where the significant operation than the GOT on the Not doing so can cat. Do not use the Mult cause a serious accio. An independent and configure the device I Failure to observe the output or malfunction DESIGN PRECAUTION	ndicates that in conditions, resu- or physical dam ances, procedu nt to follow the IS \bigcirc D e Multi-Drop (ng circuit shou use an acciden o fault (includi GOT becomes) o T, communic GOT becomes) e GOT is use- n to the system assumption th use an acciden i-Drop Connect redundant hard that displays an is instruction r	ncorrect handling n rage. The indicated by "C directions for usage ANGER Connection Unit or Id be provided to ch nt. It due to false outpung able discommunition between the inoperative. It due to false outpung a should be config to y using the switt to us to false outpunt to not a should be config to should be config to should be config to using the switt a GOT communit to due to false outpunt to not a should be config to outputs serious with ware or mechanismous with a very reserious with the outputs serious with the outputs the outputs serious with the outputs of the outputs the outputs serious with the outputs of the outputs of the the outputs serious with the outputs of the output series of the outputs of the output series	nay cause hazardous slight personal injury CAUTION" may also be e. Cable may keep the heck for output signals it or malfunction. ection) occurs during GOT and PLC CPU is gured to perform any ches of a device other cation fault will occur. It or malfunction. arning device that may I interlock is required to arning. cident due to incorrect	Undertightening căn cause cause a short circuit or malfi Cause a short circuit or malfi PRECAUTIONS Do not disassemble or modil Doing so can cause a failure Do not touch the conductiv Unit directly. Doing so can cause a Multi-1 The cables connected to the clamped. Not doing so can cause the due to the dangling, motior malfunction due to a cable c When unplugging the cable portion. Doing so can cause malfunction due to a cable c Do not drop or apply any imj If any impact has been appli The battery may be damage Before touching the unit, al electricity from human body, Not doing so can cause the l	a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit.
CAUTION C	ndicates that in conditions, resu- or physical dam ances, procedu nt to follow the HS \bigcirc D , e Multi-Drop C ng circuit shou reduction that OT, communic GOT becomes an acciden of fault (includi OT, communic GOT becomes to the system to the system assumption th use an acciden i-Drop Connecci- terd. Indant hard that displays an is instruction r HS \bigcirc C O notrol and comm	ncorrect handling n rage. res indicated by "C directions for usage ANGER Connection Unit or Id be provided to cl nt. t due to false outpu ng cable disconnu- tion between the inoperative. d should be config by using the switch t due to false outpu dis on the secont t due to false outpu dis on the secont t due to false outpu dis output serious winary result in an ac caution between the second to the second to use the second to the ware or mechanical d outputs serious winary result in an ac	ray cause hazardous sight personal injury CAUTION" may also be e. cable may keep the heck for output signals t or malfunction. ection) occurs during GOT and PLC CPU is gured to perform any ches of a device other cation fault will occur. t or malfunction. arning device that may I interlock is required to arning. cident due to incorrect	Undertightening căn cause cause a short circuit or malfi Exacts a short circuit or malfi PRECAUTIONS Do not disassemble or modil Doing so can cause a failure Do not touch the conductivu Unit directly. Doing so can cause a Multi-1 The cables connected to the clamped. Not doing so can cause the due to the dangling, motior malfunction due to a cable c When unplugging the cable portion. Doing so can cause malfunction due to a cable c Do not drop or apply any imp if any impact has been appli The battery may be damage Before touching the unit, ai electricity from human body, Not doing so can cause the l DISPOSAL PRECAUTIONS • When disposing of the produ	a a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit.
CAUTION C	ndicates that in conditions, resu- or physical dam ances, procedu nt to follow the IS \bigcirc D , e Multi-Drop C ng circuit shou e multi-Drop C ng circuit shou se an acciden a fault (includi OT, communic GOT becomes) e GOT is use- to the system a sasumption th use an acciden i-Drop Connec- ienc. In assumption th ard that displays an is instruction r IS \bigcirc C control and comr resegnately fro	ncorrect handling n rage. res indicated by "C directions for usage ANGER Connection Unit or Id be provided to cl nt. t due to false outpu ng cable discontin t due to false outpu ng cable discontin t due to false outpu discontine to the config by using the switch t due to false outpu tion Unit as the config t due to false outpu tion Unit as the ancial d outputs serious winary result in an acc cautions and the config the serious winary result in an acc caution of the config tion of the config to the config tion of the config to the to false output tion Unit as the config ware or mechanical d outputs serious winary result in an acc caution cables we on such wiring and	ray cause hazardous slight personal injury CAUTION" may also be e. cable may keep the heck for output signals t or malfunction. ection) occurs during GOT and PLC CPU is gured to perform any ches of a device other cation fault will occur. t or malfunction. arning device that may I interlock is required to arning. cident due to incorrect	Undertightening căn cause cause a short circuit or malfi Cause a short circuit or malfi PRECAUTIONS Do not disassemble or modil Doing so can cause a failure Do not touch the conductiv Unit directly. Doing so can cause a Multi-1 The cables connected to the clamped. Not doing so can cause the due to the dangling, motior malfunction due to a cable c When unplugging the cable portion. Doing so can cause malfunction due to a cable c Do not drop or apply any imp if any impact has been appli The battery may be damage Before touching the unit, al electricity from human body, Not doing so can cause the I DISPOSAL PRECAUTIONS • When disposing of the produ TRANSPORTATION PRECAUTIONS	a a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit.
CAUTION C	ndicates that in conditions, resu- or physical dam ances, procedu nt to follow the IS \bigcirc D , e Multi-Drop C ng circuit shou use an acciden n fault (includi GOT becomes) e GOT is use- to the system e GOT is use- to the system i-Drop Connect i-Drop Connect i-	ncorrect handling n rage. res indicated by "C directions for usage ANGER Connection Unit or Id be provided to ch nt. t due to false outpu ng cable disconnu- tion between the inoperative. d should be config by using the switch to due to false outpu tion Unit as the wa ware or mechanical do outputs serious w may result in an ac CAUTION munication cables w or musch wing and so noise can cause	ray cause hazardous slight personal injury CAUTION" may also be e. Cable may keep the heck for output signals t or malfunction. ection) occurs during GOT and PLC CPU is gured to perform any ches of a device other cation fault will occur. t or malfunction. arning device that may I interlock is required to arning. cident due to incorrect with main-circuit, power keep them a minimum e a malfunction.	Undertightening căn cause cause a short circuit or malfi Cause a short circuit or malfi PRECAUTIONS Do not disassemble or modil Doing so can cause a failure Do not touch the conductiv Unit directly. Doing so can cause a Multi- The cables connected to the clamped. Not doing so can cause the due to the dangling, motior malfunction due to a cable c When unplugging the cable portion. Doing so can cause malfunction due to a cable c Do not drop or apply any imp if any impact has been appli The battery may be damage Before touching the unit, ali electricity from human body, Not doing so can cause the I DISPOSAL PRECAUTIONS • When disposing of the produ TRANSPORTATION PRECAUTIONS • Make sure to transport the unit(s) in the manner they w	a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit. CAUTION Ty the Multi-Drop Connection Unit. e, malfunction, injury or fire. e and electronic parts of the Multi-Drop Connection Drop Connection Unit malfunction or failure. a Multi-Drop Connection Unit must be run in ducts or Multi-Drop Connection Unit must be to be damaged nonection fault. Addition fault. pact of the battery and never use it. d) the drop or impact. ways to the battery. ed, discard the battery and never use it. d) the drop or impact. ways touch grounded metal, etc. to discharge static etc. Multi-Drop Connection Unit to fail malfunction.
CAUTION C	ndicates that in conditions, resu- or physical dam ances, procedu nt to follow the IS \bigcirc D , e Multi-Drop C ng circuit shou use an acciden a fault (includi GOT becomes) GOT becomes) e GOT is use- to the system e GOT is use- to the system assumption th use an acciden i-Drop. Connect dibat displays an is instruction r IS \bigcirc C control and comr as separately for apart.Not doing	ncorrect handling n res indicated by "C directions for usage ANGER Connection Unit or Id be provided to ch nt. t due to false outpung cable discontin t due to false outpung cable discontin t due to false outpung to be using the switch by using the switch to by using the switch to up the serious with ware or mechanics ware or mechanics ware or mechanics with the output serious with munication cables with the serious with the serious with the serious with the serious with the series of the series of the series of the series of the series of the	ray cause hazardous slight personal injury CAUTION" may also be e. Cable may keep the heck for output signals it or malfunction. ection) occurs during GOT and PLC CPU is gured to perform any ches of a device other cation fault will occur. tor malfunction. arning device that may I interlock is required to arning. cident due to incorrect with main-circuit, power keep them a minimum a malfunction.	Undertightening căn cause cause a short circuit or malfi Cause a short circuit or malfi PRECAUTIONS Do not disassemble or modil Doing so can cause a failure Do not touch the conductiv Unit directly. Doing so can cause a Multi- The cables connected to the clamped. Not doing so can cause the due to the dangling, motior malfunction due to a cable c When unplugging the cable portion. Doing so can cause malfunction due to a cable c Do not drop or apply any imp if any impact has been appli The battery may be damage Before touching the unit, al electricity from human body, Not doing so can cause the I DISPOSAL PRECAUTIONS • When disposing of the production TRANSPORTATION PRECAUTIONS • Make sure to transport the I unit(s) in the manner they w resistance described in the precision devices. Failure to	a a short circuit or malfunction. Overtightening can unction due to the damage of the screws or unit.

Compliance with EC directive (CE Marking)

This note does not guarantee that an entire mechanical module produced in accordance with the contents of this note will comply with the following standards. Compliance to EMC directive for the entire mechanical module should be checked by the user / manufacturer. For more details please contact the local Mitsubishi Electric sales site.

Attention

- This product is designed for use in industrial applications
- Manufactured by: Mitsubishi Electric Corporation
- 2-7-3 Marunouchi, Chiyoda-ku, Tokyo 100-8310 Japan Manufactured at: Mitsubishi Electric Corporation Himeji Works
- 840 Chiyoda-machi, Himeji, Hyogo 670-8677 Japan Authorized Representative in the European Community:
- Mitsubishi Electric Europe B.V.

Gothaer Str. 8, 40880 Ratingen, Germany

Requirement for Compliance with EMC directive

The following products have shown compliance through direct testing (to the identified standards) and design analysis (forming a technical construction file) to the European Directive for Electromagnetic Compatibility (2004/108/EC) when used as directed by the appropriate documentation. Type :Programmable Controller (Open Type Equipment)

Standard		Remark	
131-2 : 2007	EMI	Compliance with all relevant aspects of the standard. (Radiated Emissions)	
ammable ollers- ment, rement and tests	EMS	Compliance with all relevant aspects of the standard. (ESD, RF electromagnetic field, EFTB, Surge, RF conducted disturbances and Power frequency magnetic field)	

For more details please contact the local Mitsubishi Electric sales site.

Associated Manuals

The following manuals are relevant to this product. When these loose manuals are required, please consult with our local distributor.

Manual Name	Manual Number (Model Code)	Description
GOT1000 Series Connection Manual 1/3, 2/3, 3/3	SH-080532ENG (1D7M26)	Describes system configurations of connection methods applicable to GOT1000 series and cable creation methods
GOT1000 Series Connection Manual (Mitsubishi Products) for GT Works3	SH-080868ENG (1D7MC2)	Describes system configurations of connection methods applicable to GOT1000 series and cable creation methods
GT Designer2 Version2 Basic Operation/Data Transfer Manual (For GOT1000 Series)	SH-080529ENG (1D7M24)	Describes methods of the GT Designer2 installation operation, basic operation for drawing and transmitting data to GOT1000 series
GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) 1/3, 2/3, 3/3	SH-080530ENG (1D7M25)	Describes specifications and settings of the object functions used in GT Designer2
GT Designer3 Version1 Screen Design Manual (For GOT1000 Series) (Fundamentals) 1/2, 2/2	SH-080866ENG (1D7MB9)	Describes methods of the GT Designer3 installation operation, basic operation for drawing and transmitting data to GOT1000 series

EN61

Progr

contro

Equip

reauir

Bundled Items

Included Item	Number of Items
GT01-RS4-M main unit	1
Power supply cable with connectors	1
GT01-RS4-M Serial Multi-Drop Connection Unit USER'S MANUAL (this manual)	1

1. System Configuration

1.1 System Configuration

GOT multi-drop connection is a communication method for 1:N communication by connecting multiple GOTs to one PLC, using the GT01-RS4-M serial multi-drop connection module.

For details of the system configuration, refer to the GOT1000 Series Connection Manual.



1.2 Compatible PLC

For PLCs compatible with the GOT multi-drop connection, refer to the GOT1000 Series Connection Manual

1.3 Compatible GOT

The followings are the GOTs compatible with the GOT multi-drop connection. For the confirmation method of the hardware version, refer to the User's Manual of each GOT.

GOT	Hardware version
GT16	Version A or later
GT1500	Version / or later
GT1155-QTBD	Version C or later
GT1155-QSBD, GT1150-QLBD	Version F or later
GT1055-QSBD, GT1050-QBBD	Version C or later
GT1045-QSBD, GT1040-QBBD	Version A or later
GT1030-LBD/LWD, GT1030-LBDW/LWDW GT1030-HBD/HWD, GT1030-HBDW/HWDW	Version B or later
GT1020-LBD/LWD, GT1020-LBDW/LWDW	Version E or later

1.4 Compatible drawing software version

GT Designer2 Version2 (Ver.2.93X or later)

GT Designer3 Version1 (Ver.1.01B or later) (Ver.1.14Q or later is applicable to GT16 and GT15.)

2. Outline Procedure

The outline procedure is shown below.

GT11 installation follows.

- Install the OS.
- Install the communication driver of the PLC connected to the multi-drop connection module.
- Install the communication driver (multi-drop (Slave)) to the GOT.
- For details of the installation method, refer to the GT Designer2 Version2 Basic Operation/Data Transfer Manual or GT Designer3 Version1 Screen Design Manual.

(For GOT)

For GT Designer2







Communicate with GT01-RS4-M
GT01-RS4-M Write(OS)
Sundard Institute 05 Sundard Institute 05 Communication Alone 01 Communication Alone 01 Communication Alone 01 Missec 4(n) 47 / 01
Wite
Communication Configuration Close

🛎 🗖 Stan	dard monitor DS		^	Drive information	
e 🗹 Com	munication driver	171 (24 10 1 02 02)		User area size:	
	J71QC24, MELD/ J71C24/UC24 [0/	AS C6" [04.03.00] 4.03.00]		Empty area size:	
	ELSEC-FX (04.03 C-Link/G4) (04.03	3.00] 3.001		Memory meter	
	ELSERV0-J3J2	S/M [04.03.00]		Used Emp	9
	lultidrop(Slave) [0 REQROL 500/70	14.03.00) 10 (04.03.00)			
<u> </u>	MRON SYSMAC	[04.03.00]		- Boot Mamoni informatio	~
	MHUN (HERMA EYENCE KV-700.	NU/INPANEL NEO (04.0 1/1000 (04.03.00)	cool	United and the second s	
EK.	OYO KOSTAC/D	L [04.03.00]		User area size:	
□ □ 1	FEKT TOYOPUC	-PC [04.03.00]		Emply area size:	
- П S	HARP JW [04.03	2001			
	HARP JW/ (04.03 HINKO TECHNO	IS CONTROLLER 104.03	.001 💌		
GOT Type	HARP JW (04.03 HINKO TECHNO	11""-Q(320x240)	.001 💌		
GOT Type	HARP JW (04.03 HINKO TECHNO	11 ¹¹⁻⁴ 0(329x240)	• •		
GOT Type Transfer sk	HARP JW (04.03 HINKO TECHNO GT MK	11 Q(320+240) 150 kbpte 150 kbpte	.001		
GOT Type Transfer si Drive: Boot Drive	HARP.JW (04.03 HINKO TECHNO GT 06 05) [08	111" Q(320x240) 150 kbg/c 150 kbg/c Gultin Flash Memory Gultin Flash Memory			

(For GOT)

mmunicate with GOT	SOT Verity
Write Data: Project Data, DS Boot DS S	pecial Data
Write Mode: Select write data	Write Check Acquire GDT information.
GOT Type: GT11 ³⁴ Q(320x240) v Destination Drive: C:Built in Flash Memory v	
	Write Data Size
Communication driver	DS: 150 Kbyte
A/0rA/L/0 CPU, 0J71C24, LJ71C24 (05.02.00 A/710C24, MELDAS C5* (05.02.00) A/71C24/UC24 (05.02.00) A/71C24/UC24 (05.02.00) A/71C24/UC24 (05.02.00)	Total 150 Kbyte
CCLink[G4] (05.02.00] MELSERVD J3,125/M (05.02.00] W Multicrep(Skive) (05.02.00]	Write Drive Information
- TREORDL 500/700 (05.02.00)	Data Area: Kbyte
OMPON SYSMAC (55 02 00) OMPON SYSMAC (55 02 00) KEYENCE KYSMON (55 02 00) KEYENCE KYSMON (55 02 00) KEYENCE KYSMON (55 02 00) JIEKT TOYDHUCPE (55 02 00) SUMMON TEYLMINE CONTERNING (55 02 00) SUMMON TEYLMINE CONTERNING (55 02 00)	Free Space: Kbyte
Write after deleting all contents in the project folder	GOT Wite
Communication Config	uration Info Reception Close

2) Make sure that the OS is installed.

Check GT Designer2 or GT Designer3 drive information to know if the OS is properly installed in the GOT.

For details, refer to the GT Designer2 Version2 Basic Operation/Data Transfer Manual or GT Designer3 Version1 Screen Design Manual. 3) Set the communication interface.

- For the multi-drop connection module, set the communication interface in the communication setting with GT01-RS4-M of GT Designer2 or GT Designer3.
- For the GOT, set the communication interface in the Communication Settings of GT Designer2 or GT Designer3.

For details, refer to the GT Designer2 Version2 Basic Operation/Data Transfer Manual or GT Designer3 Version1 Screen Design Manual.

- For GT Designer2 (For multi-drop connection module)



For GT Designer3

(For multi-drop connection module)



(For GOT)



(For GOT)



4) Download the project data.

For instructions on how to download the project data, refer to the GT Designer2 Version2 Basic Operation/Data Transfer Manual or GT Designer3 Version1 Screen Design Manual.

5) Connect the cable.

For details of the cable connection, refer to the GOT1000 Series Connection Manual.

3. Specifications

2.4 Concret Specifications

Item				Specifications		
Operating ambient temperature	0 to 55°C					
Storage ambient temperature	-20 to 60°C					
Operating/Storage ambient humidity	10 to 90% RH, non-c	ondensing (The wet bull	o temperature is 39	°C or less.)		
			Frequency	Acceleration	Half-amplitude	Sweep Count
		Installed with DIN	10 to 57Hz	- 1	0.035mm	
Vibration resistance	Conforms to JIS C60068-2-6	rail	57 to 150Hz	4.9m/s ²	-	10 times each in X, Y and Z
		Directly installed	10 to 57Hz	-	0.075mm	(Total 80 minutes for each)
			57 to 150Hz	9.8m/s ²	-	1
Shock resistance	Conforms to JIS C60	068-2-27 (147 m/s ² , 11	ms, Sine half-wave	pulse, 3 times each	in the X, Y, and Z directi	ons)
Operating atmosphere	Must be free of lamp direct sunlight. (This	black, corrosive gas, fla applies for storage as w	immable gas, or ex ell)	cessive amounts of	electro conductive dust p	particles and must not be placed in
Operating altitude	2000m (6562 ft) max	.*1				
Cooling method	Self-cooling					
External dimensions (D×W×H)	90×65×90mm					
Weight	Approx. 0.3kg					
Installation method	Using DIN rail or fixe	d with screws				
Exterior color (Case)	Standard color of Mit	subishi Electric (Black: c	orresponding to N-	0230-BG)		
Standard	Conforms to CE					

*1 Cannot be used under pressures higher than the atmospheric pressure. Failure to observe this instruction may cause the unit to fail.

3.2 Communication Specifications

lt	em	I/F1 (RS-422) I/F2 (RS-232)		I/F3 (RS-485)	I/F4 (USB)
Connecti configuratio	nnection 1:1 1:N		1:N	1:1	
	Transmissi on method	RS-422 1ch	RS-232 1ch	RS-485 1ch	USB device 1ch
Transmiss	Transmissi on speed 115, 200/57, 600/38, 400/19, 200/9, 600/4, 800 bps				Full Speed 12Mbps
standard	Insulation method	Photocoupler insulation			
Connector		D-sub 9-pin (female)	D-sub 9-pin (male)	Terminal block (attach/detach type)	Mini-B
Transmissio	on distance	30m or less	3m or less	500m (max.) (maximum overall extension length of the system)	
Number of can be con	f GOTs that nected	1		16 (max.)	1
Communication method Full duplex			Half duplex and full duplex (Can be selected depending on the wiring)	-	
Application		For PLC connection (Cannot be used simultaneously with I/F2) with I/F1)		For multi-drop connection	PC communication (OS installation)

3.3 Power Supply Specifications

Item	Specifications
Input power supply voltage	24VDC (+10%, -15%)
Fuse (built-in, not exchangeable)	1A
Power consumption	3.36W or less (140mA/24VDC)
Inrush current	14A or less (24VDC, 2ms)
Dielectric withstand voltage	500VAC for 1 minute (across power supply terminals and earth)
Insulation resistance	$10M\Omega$ or larger by insulation resistance tester (across power supply terminals and earth)
Grounding	Class D grounding (100 Ω or less), To be connected to the panel when grounding is not possible

3.4 LED Light Specifications

LED Name	Status	Description
POWER	Lit	Power is properly supplied.
TOWER	Not lit	Power is not properly supplied.
SD.	Lit	Sending the data to PLC
30	Not lit	Not sending the data to PLC
PD	Lit	Receiving the data from PLC
KD .	Not lit	Not receiving the data from PLC
	Not lit	No error
ERROR*1	Lit in red	Communication error with PLC
	Blinking in red	Multi-drop communication error

*1 For details of corrective actions, refer to Chapter 7 Troubleshooting.

4. External Dimensions and Part name







No	Name		Specifications			
1)	Installation hole for the main unit		Installation hole			
		POWER	Lit in green when the power is properly supplied.			
2)		SD	Lit in green when the data is being sent to PLC.			
2)		RD	Lit in green when the data is being received from PLC.			
		ERROR	Lit or blinking depending on the status.			
3)	Terminating resistor selector		Can be selected among 110 $\!\Omega,$ OPEN and 330 $\!\Omega$ (set to "OPEN" by default)			
4)	Connector for PLC communication (for RS-232 connection)		D-sub 9-pin (male)			
5)	Connector selection switch for PLC communication		Switch for selecting RS-422 or RS-232 (set to "RS-422" by default)			
6)	USB port		For connecting to a personal computer (for changing the communication driver)			
7)	Connector for PLC communication (for RS-422 connection)		D-sub 9-pin (female)			
8)	Protective cover		Protect unused D-sub connector, USB port and switches.			
9)	Terminal block for the serial multi-drop communication		Terminal block 5-pin (with a protective cover) M3 Tightening torque 0.5 to 0.6N.m			
10)	Power supply connector		24VDC power supply connector insertion point (A dedicated cable is included.)			
11)	Slider for installing the DIN rail		-			
12)	Mode selection switch (Slide switch)		Do not operate. (Set to right by default. When set to left, the module does not operate normally.)			

5. Installation

5.1 Installed with DIN Rail

Install the multi-drop connection module with its hook (1 place) using the DIN rail. Applicable DIN rail DIN46277 (width: 35mm) (Install the DIN rail with screws at intervals of 150mm.)

5.2 Directly Installed to Panel

Install the multi-drop connection module to the panel using \$4.5mm holes (2 places)

5.3 Caution for compliance with EMC Directive

Programmable logic controllers are open-type devices that must be installed and used within conductive control boxes. Please use the Multi-Drop Connection Unit while installed in conductive shielded control boxs. Please secure the control box (for conduction). Installation within a control box affects the safety of the system and aids in shielding noise from the Multi-Drop Connection Unit

6. Wiring

6.1 Power Supply Wiring

Connect the power supply cable with connectors (included) and the 24VDC terminal of the external power supply



6.2 Wiring and Terminating Resistor Setting

6.2.1 For 1 pair wiring

Make sure to ground a twisted pair cable by applying Class D Grounding (100 Ω or less).



*1 The terminating resistor 110Ω is built in the multi-drop connection module and GOT (GT10,GT11).

Make sure to set the terminating resistor to both ends of the line. For GT15 or GT16, external winning is required. Set the terminating resistor of the GOT that is not at the end of the line to "OPEN".

6.2.2 For 2 pair wiring

Make sure to around a twisted pair cable by applying Class D Grounding (100 Ω or less).



*1 The terminating resistor 3300 is built in the multi-drop connection module and GOT (GT10.GT11). Make sure to set the terminating resistor to both ends of the line For GT15 or GT16 external wring is required, set the terminating resistor of the GOT that is not at the end of the line to "OPEN".

7. Troubleshooting

In the case where ERROR LED is lit or blinking, check the following items.

Status of ERROR LED	Description
Lit in red	Check the following items. Check if the power supply status is normal or not. Check the wiring of the connection cable. Install the correct communication driver. Check if the communication interface to which the cable is connected is correct or not. Check the setting of the RS-422/RS-232 selector switch.
Blinking in red	 Check the following items. Check that the Mode selection switch is set to the right. The OS may be faulty. Install the standard OS and communication driver from GT Designer2 or GT Designer3 to the multi-drop module again.

This manual confers no industrial property rights or any rights of any other kind, nor does it confer any patent licenses. Mitsubishi Electric Corporation cannot be held responsible for any problems involving industrial property rights which may occur as a result of using the contents noted in this manual.

Warranty

Mitsubishi will not be held liable for damage caused by factors found not to be the cause of Mitsubishi; opportunity loss or lost profits caused by faults in the Mitsubishi products; damage, secondary damage, accident compensation caused by special factors unpredictable by Mitsubishi: damages to products other than Mitsubishi products; and to other duties

A For safe use

- This product has been manufactured as a general-purpose part for general industries, and has not been designed or manufactured to be incorporated in a device or system used in purposes related to human life.
- Before using the product for special purposes such as nuclear power, electric power, aerospace, medicine or passenger movement vehicles, consult with Mitsubishi Electric
- This product has been manufactured under strict quality control. However when installing the product where major accidents or losses could occur if the
- product fails, install appropriate backup or failsafe functions in the system.

MITSUBISHI ELECTRIC CORPORATION

HEAD OFFICE : TOKYO BUILDING, 2-7-3 MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN HIMEJI WORKS : 840, CHIYODA CHO, HIMEJI, JAPAN

JY997D35801E

MITSUBISHI Changes for the Better GT01-RS4-M Serial Multi-Drop Connection Unit	 Be sure to shut off all phases of the external power supply used by the system before mounting or removing the Multi-Drop Connection Unit to/from the panel. Not doing so can cause the unit to fail or malfunction. When installing the battery wear an earth band etc. to avoid the static electricity. The static electricity can cause the unit to fail or malfunction.
USER'S MANUAL	
Manual Number JY997D35801E Date Jul. 2011	 Use the Multi-Drop Connection Unit in the environment that satisfies the general specifications described in this manual. Not doing so can cause an electric shock, fire, malfunction or product damage or deterioration.
This manual describes the specifications of the product. Before use, read this manual and manuals of relevant products fully to acquire proficiency in handling and operating the product. Make sure to learn all the product information, safety information, and precautions.	WIRING PRECAUTIONS DANGER Be sure to shut off all phases of the external power supply used by the system before widen. Failure to do so the external power supply used by the system before widen.
And, store this manual in a safe place so that you can take it out and read it whenever necessary. Always forward it to the end user. Registration The company name and the product name to be described in this manual are the registered trademarks or trademarks of each company.	 Please make sure to ground FG terminal of the Multi-Drop Connection Unit power supply section by applying 100 or less which is used exclusively for the GOT. Not doing so may cause an electric shock or malfunction.
Effective Jul. 2011 Specifications are subject to change without notice. © 2009 Mitsubishi Electric Corporation	Correctly wire the Multi-Drop Connection Unit power supply section after confirming the rated voltage and terminal arrangement of the product. Not doing so can cause a fire or failure. Tighten the terminal screws of the Multi-Drop Connection Unit power supply
Safety Precaution (Read these precautions before using.) lefore using this product, please read this manual and the relevant manuals throduced in this manual carefully and pay full attention to safety to handle the roduct correctly. The precautions given in this manual are concerned with this product.	 Section in the specified torque range. Underlightening can cause a short circuit or malfunction. Overtightening can cause a short circuit or malfunction due to the damage of the screws or the Multi-Drop Connection Unit. Exercise care to avoid foreign matter such as chips and wire offcuts entering the Multi-Drop Connection Unit. Not doing so can cause a fire, failure or malfunction.
h this manual, the safety precautions are ranked as "DANGER" and "CAUTION".	
CAUTION Conditions, resulting in medium or subject hazardous conditions, resulting in death or severe injury. Indicates that incorrect handling may cause hazardous conditions, resulting in medium or slight personal injury	 Plug the communication cable into the connector of the connected unit and tighten the mounting and terminal screws in the specified torque range. Undertightening can cause a short circuit or malfunction. Overtightening can cause a short circuit or malfunction due to the damage of the screws or unit.
bepending on circumstances, procedures indicated by "CAUTION" may also be nked to serious results.	
n any case, it is important to follow the directions for usage.	Do not disassemble or modify the Multi-Drop Connection Unit. Doing so can cause a failure, malfunction, injury or fire.
 Some failures of the Multi-Drop Connection Unit or cable may keep the outputs on or off. An external monitoring circuit should be provided to check for output signals which may lead to a serious accident. Not doing so can cause an accident due to false output or malfunction. If a communication fault (including cable disconnection) occurs during monitoring on the GOT communication between the GOT and PLC CPU is suspended and the GOT becomes inoperative. A system where the GOT is used should be configured to perform any significant operation to the system by using the switches of a device other than the GOT on the assumption that a GOT communication fault will occur. Not doing so can cause an accident due to false output or malfunction. Do not use the Multi-Drop Connection Unit as the warning device that may cause a serious accident. An independent and redundant hardware or mechanical interlock is required to configure the device that displays and outputs senious warning. Failure to observe this instruction may result in an accident due to incorrect output or maffunction. 	Unit directly. Doing so can cause a Multi-Drop Connection Unit malfunction or failure. The cables connected to the Multi-Drop Connection Unit must be run in ducts or clamped. Not doing so can cause the Multi-Drop Connection Unit or cable to be damaged due to the dangling, motion or accidental pulling of the cables or can cause a malfunction due to a cable connection fault. When unplugging the cable connected to the unit, do not hold and pull the cable portion. Doing so can cause the unit or cable to be damaged or can cause a malfunction due to a cable connection fault. Do not drop or apply any impact to the battery. If any impact has been applied, discard the battery and never use it. The battery may be damaged by the drop or impact. Before touching the unit, always touch grounded metal, etc. to discharge static electricity from human body, etc. Not doing so can cause the Multi-Drop Connection Unit to fail malfunction.
	When disposing of the product, handle it as industrial waste
Do not bundle the control and communication cables with main-circuit, power or ther wiring	
Run the above cables separately from such wiring and keep them a minimum of 100mm (3.94in.) apart.Not doing so noise can cause a malfunction.	Make sure to transport the Multi-Drop Connection Unit main unit and/or relevant unit(s) in the manner they will not be exposed to the impact exceeding the impact resistance described in the general specifications of this manual, as they are precision devices. Failure to do so may cause the unit to fail. Check if the unit operates correctly after transportation.

ompliance with EC directive (CE Marking) is note does not guarantee that an entire mechanical module produced in cordance with the contents of this note will comply with the following standards. mpliance to EMC directive for the entire mechanical module should be checked the user (may leadure). the user / manufacturer. For more details please contact the local Mitsubishi ctric sales site.

tention

- This product is designed for use in industrial applications. Manufactured by: Mitsubishi Electric Corporation 2-7-3 Marunouchi, Chiyoda-ku, Tokyo 100-8310 Japan Manufactured at: Mitsubishi Electric Corporation Himeji Works 840 Chiyoda-machi, Himeji, Hyogo 670-8677 Japan Authoricad Borgenethic in br. European Computer
- Authorized Representative in the European Community: Mitsubishi Electric Europe B.V. Gothaer Str. 8, 40880 Ratingen, Germany.

sociated Manuals following manuals are relevant to this product. When these loose manuals are required, please consult with our local distributor.

Manual Name	Manual Number (Model Code)	Description
GOT1000 Series Connection Manual 1/3, 2/3, 3/3	SH-080532ENG (1D7M26)	Describes system configurations of connection methods applicable to GOT1000 series and cable creation methods
GOT1000 Series Connection Manual (Mitsubishi Products) or GT Works3	SH-080868ENG (1D7MC2)	Describes system configurations of connection methods applicable to GOT1000 series and cable creation methods
GT Designer2 Version2 Basic Operation/Data Transfer Manual For GOT1000 Series)	SH-080529ENG (1D7M24)	Describes methods of the GT Designer2 installation operation, basic operation for drawing and transmitting data to GOT1000 series
GT Designer2 Version2 Screen Design Manual For GOT1000 Series) 1/3, 2/3, 3/3	SH-080530ENG (1D7M25)	Describes specifications and settings of the object functions used in GT Designer2
3T Designer3 Version1 Screen Design Manual For GOT1000 Series) Fundamentals) 1/2, 2/2	SH-080866ENG (1D7MB9)	Describes methods of the GT Designer3 installation operation, basic operation for drawing and transmitting data to GOT1000 series

Indled Items

Included Item	Number of Items
GT01-RS4-M main unit	1
Power supply cable with connectors	1
GT01-RS4-M Serial Multi-Drop Connection Unit LISER'S MANUAL (this manual)	1

System Configuration

System Configuration

0T multi-drop connection is a communication method for 1:N communication by necting multiple GOTs to one PLC, using the GT01-RS4-M serial multi-drop nection module. details of the system configuration, refer to the GOT1000 Series Connection



1.3 Compatible GOT

The followings are the GOTs compatible with the GOT multi-drop connection. For the confirmation method of the hardware version, refer to the User's Manual of each GOT.

Requirement for Compliance with EMC directive

directed by the appropriate documentation. Type :Programmable Controller (Open Type Equipment)

EMI

EMS

For more details please contact the local Mitsubishi Electric sales site.

Standard

EN61131-2 : 2007 Programmable controllers-Equipment, requirement and tests

The following products have shown compliance through direct testing (to the identified standards) and design analysis (forming a technical construction file) to the European Directive for Electromagnetic Compatibility (2004/108/EC) when used as

Remark

Compliance with all relevant aspects of the standard. (Radiated Emissions)

Compliance with all relevant aspects of the standard (ESD, RF electromagnetic field, EFTB, Surge, RF conducted disturbances and Power frequency magnetic field)

GOT	Hardware version
GT16□□	Version A or later
GT15□□	Version A or later
GT1155-QTBD	Version C or later
GT1155-QSBD, GT1150-QLBD	Version F or later
GT1055-QSBD, GT1050-QBBD	Version C or later
GT1045-QSBD, GT1040-QBBD	Version A or later
GT1030-LBD/LWD, GT1030-LBDW/LWDW GT1030-HBD/HWD, GT1030-HBDW/HWDW	Version B or later
GT1020-LBD/LWD, GT1020-LBDW/LWDW	Version E or later

1.4 Compatible drawing software version

GT Designer2 Version2 (Ver.2.93X or later) GT Designer3 Version1 (Ver.1.01B or later) (Ver.1.14Q or later is applicable to GT16 and GT15.)

1.2 Compatible PLC

For PLCs compatible with the GOT multi-drop connection, refer to the GOT1000 Series Connection Manual.

2. Outline Procedure

The outline procedure is shown below. GT11 installation follows.

1) Install the OS.

Install the communication driver of the PLC connected to the multi-drop connection module.

Install the communication driver (multi-drop (Slave)) to the GOT.
 For details of the installation method, refer to the GT Designer2 Version2 Basic Operation/Data Transfer Manual or GT Designer3 Version1 Screen Design Manual.

- For GT Designer2 (For multi-drop connection module)





- For GT Designer2 (For multi-drop connection module) icate with GT01-RS4-M



- For GT Designer3

(For multi-drop connection module)
	Communicate with GT01-RS4-M
	GT01-RS4-M Write(OS) 22 GT01-RS4-M Write(Comm. Param.)
	For Connected GOT: Multidrop(Host) V Details
	For Controller: MELSEC-FX V Details
	Points of caution Communication parameter setting will be written into G101-RS4M. III Communication parameter setting of device for G011 connection and I2I Communication parameter setting of device for confidence connection can be set for G101-RS4M. Select a controller to be connected with G101-RS4M and set the details.

(For GOT)

System Environment					
System Environment System Settings	🔽 Lise Communic	cation Settings			
- Troject Title	Standard I/F Settin	ngs:			
- Q System Information	~	CH No. I/F	Driver		
Screen Switching	Standard (/P+1)	1 × HS4227232	[Multidrop(Slave]	*	Detail Setting
- they Window	Standard I/F-2	9 • RS232	Host(PC)	*	Detail Setting
Dialog Window	Standard I/F-3	9 💌 US8	Host(PC)	*	
GOT Setup		ar	Canada La Assela		
- K Language Switching		01	Carcar 0449		
Startup Logo					
- E Handy GOT					





📰 🕂 🛄 GOT Weite 🔤 🖛 🗖 GOT Verity Data, DS 🚫 Boot DS Wite Check Acquire GOT information

	Write Data Size	
Communication diver	Project Data: DS:	0 Kbyte 150 Kbyte
A/0+A/L/0 CPU, 0J71C24, UJ71C24 (05.02.00 AJ710C24, MELDAS C67 (05.02.00) AJ71C24/UC24 (05.02.00) MELSEC.24 (05.02.00)	Total	150 Kbyte
CC-Link[64] [05.02.00]	Write Drive Information	
Mikidag(Siwe) (ISO 200) — EFCEND S00709 (ISO 200) — MIRION SYSMEL (ISO 200) — MIRION VISION (ISO 20	Data Area: Free Space:	Kbyte Kbyte
Write after deleting all contents in the project folder		GOT Write

2) Make sure that the OS is installed. Check GT Designer2 or GT Designer3 drive information to know if the OS is properly installed in the GOT. For details, refer to the GT Designer2 Version2 Basic Operation/Data Transfer Manual or GT Designer3 Version1 Screen Design Manual.

3) Set the communication interface

- For the multi-drop connection module, set the communication interface in the communication setting with GT01-RS4-M of GT Designer2 or GT Designer3.

For the GOT, set the communication interface in the Communication Settings of GT Designer2 or GT Designer3.
 For details, refer to the GT Designer2 Version2 Basic Operation/Data Transfer Manual or GT Designer3 Version1 Screen Design Manual.

	Wite
(Communication Conliguration Close



4) Download the project data

For instructions on how to download the project data, refer to the GT Designer2 Version2 Basic Operation/Data Transfer Manual or GT Designer3 Version1 Screen Design Manual.

5) Connect the cable. For details of the cable connection, refer to the GOT1000 Series Connection Manual.

Item			Specifications							
Operating ambient temperature		0 to 55°C	0 to 55°C							
Storage an temperatur	nbient re	-20 to 60°0	c							
Operating/ ambient hu	Storage umidity	10 to 90%	RH, non-c	ondensing (T	he wet b	ulb temperature is 39°C	or less.)			
			Frequency Acc					Half-amplitude	Sweep Count	
		Conform	e to IIS	Installed with DIN rail Directly installed	10 to 57Hz	-	0.035mm			
Vibration re	esistance	C60068-2-	6			57 to 150Hz	4.9m/s ²	-	10 times each in X, Y and Z directions	
					alled	10 to 5/Hz	- 0.8m/o ²	0.075mm	(Total 80 minutes for each)	
Shock resi	stance	Conforms	to JIS C60	068-2-27 (14	7 m/s ² . 1	1 ms. Sine half-wave pu	se. 3 times e	ach in the X. Y. and Z direct	ions)	
Operating	atmosphere	Must be fr	ee of lamp	black, corros	ive gas, i	flammable gas, or exces	sive amounts	of electro conductive dust	particles and must not be placed in	
Operating	altitude	2000m (65	62 ft) max	*1	orago do					
Cooling me	ethod	Self-coolin	g							
External di (D×W×H)	imensions	90×65×90	mm							
Weight		Approx. 0.	3kg							
Installation	method	Using DIN	rail or fixe	d with screws						
Exterior co	lor (Case)	Standard of	Standard color of Mitsubishi Electric (Black: corresponding to N-0230-BG)							
Standard		Conforms	to CE							
*1 Cannot	t be used unde	er pressures h	igher than	the atmosphe	eric press	sure. Failure to observe t	his instruction	n may cause the unit to fail.		
3.2 Com	munication	Specificat	ions							
I	tem	I/I	F1 (RS-42	2)		I/F2 (RS-232)		I/F3 (RS-485)	I/F4 (USB)	
Connecti configuration	ion on	1:1	:1				1:N		1:1	
	Transmissi on method	RS-422 1ch			RS-232	1ch	RS-485	1ch	USB device 1ch	
Transmiss	Transmissi on speed	115, 200/57,	7, 600/38, 400/19, 200/9, 600/4, 800 bps						Full Speed 12Mbps	
standard	Insulation method	Photocouple	pler insulation						-	
	Connector	D-sub 9-pin	-sub 9-pin (female)		D-sub 9	-pin (male)	Termina type)	al block (attach/detach	Mini-B	
Transmissi	ion distance	30m or less	less 3m		3m or less		500m (i extensio	max.) (maximum overall n length of the system)		
Number of can be con	of GOTs that inected	1				16 (max	.)	1		
Communication method		Full duplex	ıll duplex			Half dup (Can be the wirin	lex and full duplex e selected depending on g)			
Application		For PLC cor (Cannot be with I/F2)	C connection not be used simultaneously (Cann with I/		For PLC (Canno with I/F1	C connection t be used simultaneou 1)	sly For mult	i-drop connection	PC communication (OS installation)	
3.3 Pow	er Supply S	pecificatio	ns							
	Item						Specificat	ions		
Input power supply voltage			24VDC (+10%, -15%)							
Fuse (built	-in, not exchan	igeable)	le) 1A							
Power con	sumption		3.36W or less (140mA/24VDC)							
Inrush curr	rent		14A or less (24VDC, 2ms)							
Dielectric v	withstand voltag	ge	500VAC for 1 minute (across power supply terminals and earth)							
Insulation r	resistance		$10M\Omega$ or larger by insulation resistance tester (across power supply terminals and earth)							
Grounding			Class D grounding (100 Ω or less), To be connected to the panel when grounding is not possible							

3.4 LED Light Specifications

LED Name	Status	Description		
POWER	Lit	Power is properly supplied.		
TOWER	Not lit	Power is not properly supplied.		
90	Lit	Sending the data to PLC		
50	Not lit	Not sending the data to PLC		
PD	Lit	Receiving the data from PLC		
ND .	Not lit	Not receiving the data from PLC		
	Not lit	No error		
ERROR ^{*1}	Lit in red	Communication error with PLC		
	Blinking in red	Multi-drop communication error		

*1 For details of corrective actions, refer to Chapter 7 Troubleshooting.

4. External Dimensions and Part name



5. Installation

5.1 Installed with DIN Rail

Install the multi-drop connection module with its hook (1 place) using the DIN rail. Applicable DIN rail DIN46277 (width: 35mm) (Install the DIN rail with screws at intervals of 150mm.)

5.2 Directly Installed to Panel

Install the multi-drop connection module to the panel using 64.5mm holes (2 places).

5.3 Caution for compliance with EMC Directive

Programmable logic controllers are open-type devices that must be installed and used within conductive control boxes. Please use the Multi-Drop Connection Unit while installed in conductive shielded control boxes. Please secure the control box lid to the control box (for conduction). Installation within a control box greatly affects the safety of the system and aids in shielding noise from the Multi-Drop Connection Unit.

6. Wiring

6.1 Power Supply Wiring

Connect the power supply cable with connectors (included) and the 24VDC terminal of the external power supply





ind

6.2 Wiring and Terminating Resistor Setting

6.2.1 For 1 pair wiring

Make sure to ground a twisted pair cable by applying Class D Grounding (100 $\!\Omega$ or less). Multi-drop GOT side GOT side

Signal name Cable for GT11 Signal name SDA SDA Ő SDB SDB

Make sure to ground a twisted pair cable by applying Class D Grounding (100 Ω or less).



*1 The terminating resistor 330Ω is built in the multi-drop connection module and GOT (GT10,GT11). Make sure to set the terminating resistor to both ends of the line. For GT15 or GT16, external wiring is required. Set the terminating resistor of the GOT that is not at the end of the line to "OPEN".

GOT side

7. Troubleshooting

11) Slider for installing the DIN rail

6.2.2 For 2 pair wiring

Mode selection switch (Slide switch

Multi-drop

connection modul

12)

PLC

Status of ERROR LED	Description
it in red	Check the following items. Check if the power supply status is normal or not. Check the wiring of the connection cable. Install the correct communication driver. Check if the communication interface to which the cable is connected is correct or not. Check the setting of the RS-422/RS-232 selector switch.
Blinking in red	Check the following items. Check that the Mode selection switch is set to the right. The OS may be faulty. Install the standard OS and communication driver from GT Designer2 or GT Designer3 to the multi-drimodule again.

GOT side

Signal name



*1 The terminating resistor 110Ω is built in the multi-drop connection module and GOT (GT10,GT11). Make sure to set the terminating resistor to both ends of the line. For GT15 or GT16, external wiring is required. Set the terminating resistor of the GOT that is not at the end of the line to "OPEN".

This manual confers no industrial property rights or any rights of any other kind, nor does it confer any patent licenses. Mitsubishi Electric Corporation cannot be held responsible for any problems involving industrial property rights which may occur as a result of using the contents noted in this manual.

To not operate. (Set to right by default. When set to left, the module does not operate

GOT side

Signal

name

mallv.)

Warranty Mitsubishi will not be held liable for damage caused by factors found not to be the cause of Mitsubishi; opportunity loss or lost profits caused by faults in the Mitsubishi products; damage, secondary damage, accident compensation caused by special factors unpredictable by Mitsubishi; damages to products other than Mitsubishi products; and to other duties.



- This product has been manufactured as a general-purpose part for general industries, and has not been designed or manufactured to be incorporated in a device or system used in purposes related to human life.
 Before using the product for special purposes such as nuclear power, electric power, aerospace, medicine or passenger movement vehicles, consult with Mitsubishi Electric.
 This product has been propried under state using a such as a such as the provided of the product of the produ
- This product has been manufactured under strict quality control. However when installing the product where major accidents or losses could occur if the product fails, install appropriate backup or failsafe functions in the system.

MITSUBISHI ELECTRIC CORPORATION

HEAD OFFICE : TOKYO BUILDING, 2-7-3 MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310 JAPAN HIMEJI WORKS : 840, CHIYODA CHO, HIMEJI, JAPAN