SMS 510, CAP 505
LON Gateways Configuration

Configuration Guide

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Notice 1

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Notice 2

Additional information such as Release Notes and Last Minute Remarks can be found on the program distribution media.

Notice 3

The old name of this document is SM/Gateways Configuration.

Trademarks

Revision history:

Amendments 30.6.2003:

- The old name of the document is SM/Gateways Configuration
- Windows 2000 updates

Contents:

1. SM/Gateways

1.1. General

The SM/Gateways software module is included in CAP 505 and SMS 510. It includes the communication gateway object types, representing the physical communication gateway devices.

Currently this module supports the following communication gateway devices:

- LON/SPA Gateway, LSG (SPA-ZC100 and SPA-ZC102)
- LON®[1] Star Coupler, RER 111

The purpose of this manual is to instruct how to install LON/SPA Gateways and LON Star Couplers. This manual is intended for persons who are responsible for configuring the system.

1.2. Communication support

Table 1.2.-1 Communication support

Object type	SPA	LON
LSG	No	Yes
RER 111	No	Yes

1. LON is a registered trademark of Echelon Corporation.

2. LSG, LON/SPA Gateway

2.1. General

The LON/SPA Gateway software module can be used as communication gateway over a LONWORKS®[1] network with the following relays:

- SPACOM series of relays
- REU5XX relays of the RED 500 series of relays
- REJ5XX relays of the RED 500 series of relays

2.2. Insertion

LSG objects can be inserted only in the Master Design View mode of the Project Structure Navigator. The procedure for object insertion is explained in the CAP 505 and SMS 510 *Operator's Manuals.* Please refer to the corresponding manual for detailed information on object insertion.

You can insert LSG objects into the following locations of a project:

- Under the root node of the project
- Under a Bay object
- Under a Level object

2.3. Moving

In contrast to other objects, LSG objects are non-movable. This means that once inserted, an LSG object cannot be moved elsewhere in the tree structure.

2.4. Object visibility

LSG objects are visible only in the Master Design View, meaning that they cannot be used in a project's user views. However, the device objects hosted by an LSG object are normally visible also in the user views.

2.5. General object attributes

The general object attributes of LSG objects can be viewed on the General page of the General Object Attributes dialog in the Project Structure Navigator (see Figure 2.5.-1).

To invoke this dialog:

1. Select the LSG object in the project structure.
2. Select Object Properties from the Project Structure Navigator's Edit menu.

1. LONWORKS is a registered trademark of Echelon Corporation.

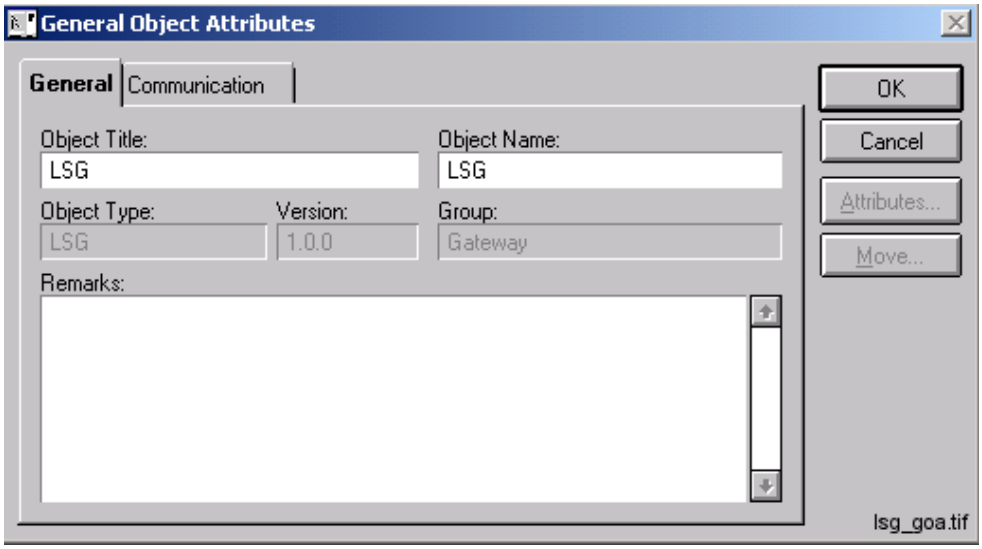

Fig. 2.5.-1 General object attributes for LSG objects

Changeable attributes are:

Object Title	The title is visible in the project structure.
Object Name	The name of the object. The name is unique in the scope of the project.
Remarks	Optional commentary text, maximum length 253 characters.

To save changes to the attributes, click OK. Otherwise, click Cancel to close the dialog discarding all the changes.

2.6. Communication settings

In order to be able to configure the communication settings of the LSG object, the project's system configuration must contain one or more LON communication channels.

The communication settings of the LSG objects are configured on the Communication page of the General Object Attributes dialog in the Project Structure Navigator (see Figure 2.6.-1).

To invoke this dialog:

1. Select the LSG object in the project structure.
2. Select Object Properties from the Project Structure Navigator's Edit menu and click the Communication page.

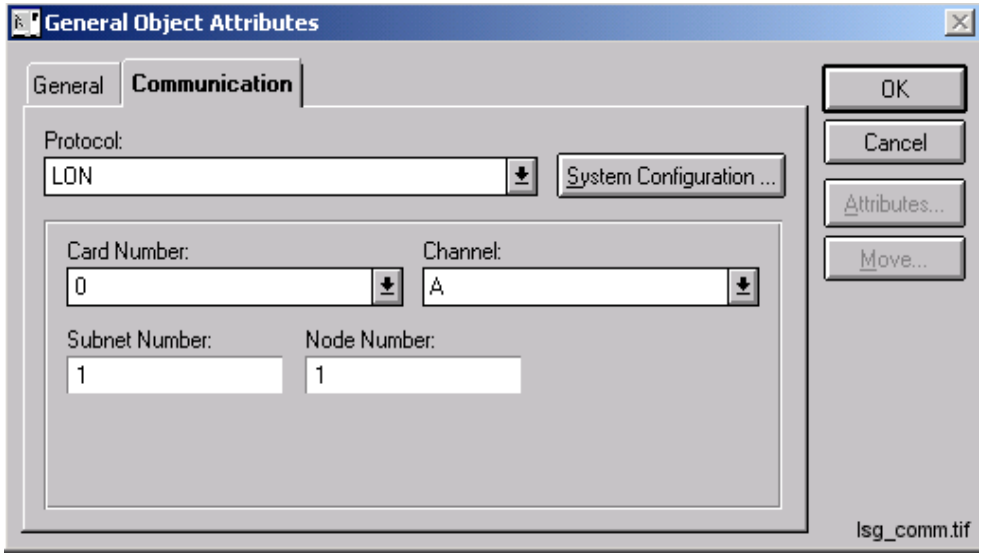

Fig. 2.6.-1 Communication settings for LSG objects

The communication settings include:

Card Number	The number of the installed LON adapter.
Channel	The channel of the installed LON adapter.
Subnet Number	A number in range of 1 through 127, inclusive. The value must match with the value assigned to the physical device.
Node Number	A number in range of 1 through 127, inclusive. The value must match with the value assigned to the physical device.

To save the settings, click OK. Otherwise, click Cancel to close the dialog discarding all the changes.

2.7. Using LSG with device objects

The procedure for using an LSG object is as follows:

1. Insert the LSG object to the project.
2. Configure the communication settings of the LSG object.
3. Select the LSG object and insert the appropriate device object directly under the LSG object.
4. Configure the device object, if it has not been done previously, and configure its communication settings.

Figure 2.7.-1 illustrates the usage of an LSG object in conjunction with a REU5XX device object.

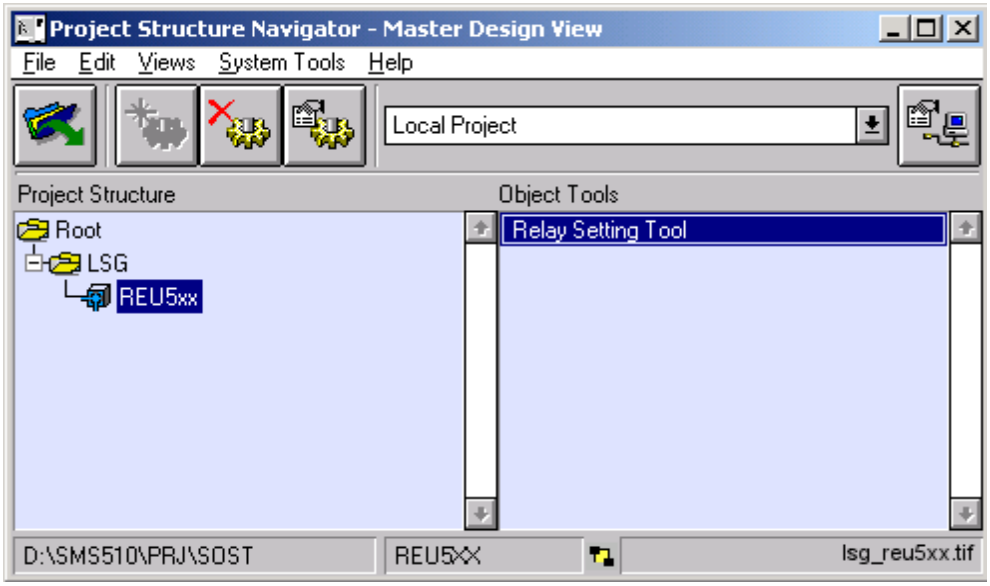

Fig. 2.7.-1 An LSG object hosting a REU5XX device object

A device object must be inserted directly under an LSG object, i.e. it cannot be moved there. Likewise, once inserted under an LSG object, a device object cannot be moved to any other location in the tree structure.

3. RER 111, LON Star Coupler

3.1. General

The RER 111 can be used as communication gateway over a LONWORKS network with the following relays:

- REF54X relays of the RED 500 series of relays
- REM54X relays of the RED 500 series of relays
- REC52X relays of the RED 500 series of relays
- REX52X relays of the RED 500 series of relays

In addition to that, RER 111 can also be used with the LSG objects.

3.2. Insertion

RER 111 objects can be inserted only in the Master Design View mode of the Project Structure Navigator. The procedure for object insertion is explained in the CAP 505 and SMS 510 *Operator's Manuals*. Please refer to the corresponding manual for detailed information on object insertion.

You can insert RER 111 objects into the following locations of a project:

- Under the root node of the project
- Under a Station object
- Under a Bay object
- Under a Level object

3.3. Moving

In contrast to other objects, RER 111 objects are non-movable. This means that once inserted, a RER 111 object cannot be moved elsewhere in the tree structure.

3.4. Object visibility

RER 111 objects are visible only in the Master Design View, meaning that they cannot be used in a project's user views. However, the device objects hosted by a RER 111 object are normally visible also in the user views.

3.5. General object attributes

The general object attributes of RER 111 objects can be viewed on the General page of the General Object Attributes dialog in the Project Structure Navigator (see Figure 3.5.-1).

To invoke this dialog:

1. Select the RER 111 object in the project structure.
2. Select Object Properties from the Project Structure Navigator's Edit menu.

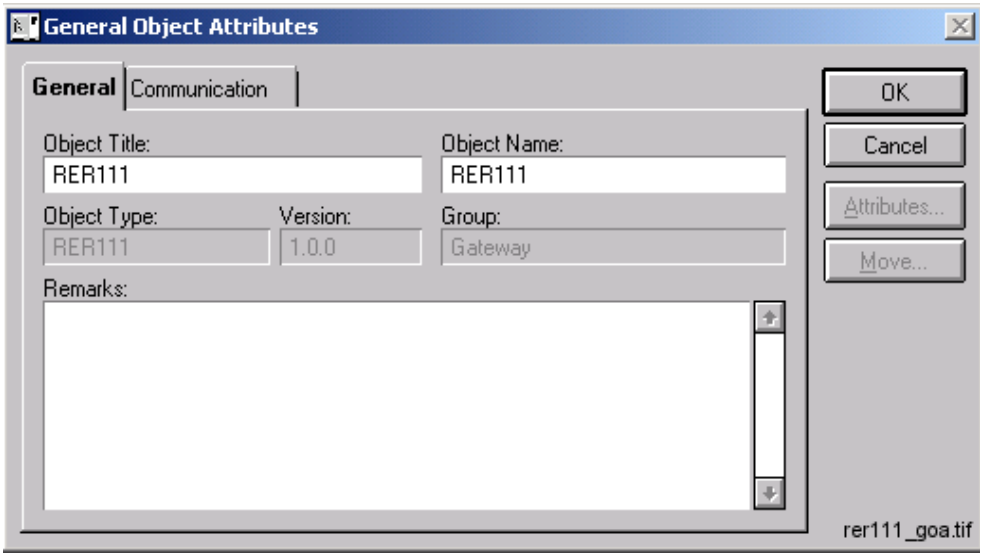

Fig. 3.5.-1 General object attributes for RER 111 objects

Changeable attributes are:

Object Title	The title is visible in the project structure.
Object Name	The name of the object. The name is unique in the scope of the project.
Remarks	Optional commentary text, maximum length 253 characters.

To save changes to the attributes, click OK. Otherwise, click Cancel to close the dialog discarding all the changes.

3.6. Communication settings

In order to be able to configure the communication settings of the RER 111 object, the project's system configuration must contain one or more LON communication channels.

The communication settings of RER 111 objects are configured on the Communication page of the General Object Attributes dialog in the Project Structure Navigator (see Figure 3.6.-1).

To invoke this dialog:

1. Select the RER 111 object in the project structure.
2. Select Object Properties from the Project Structure Navigator's Edit menu and click the Communication page.

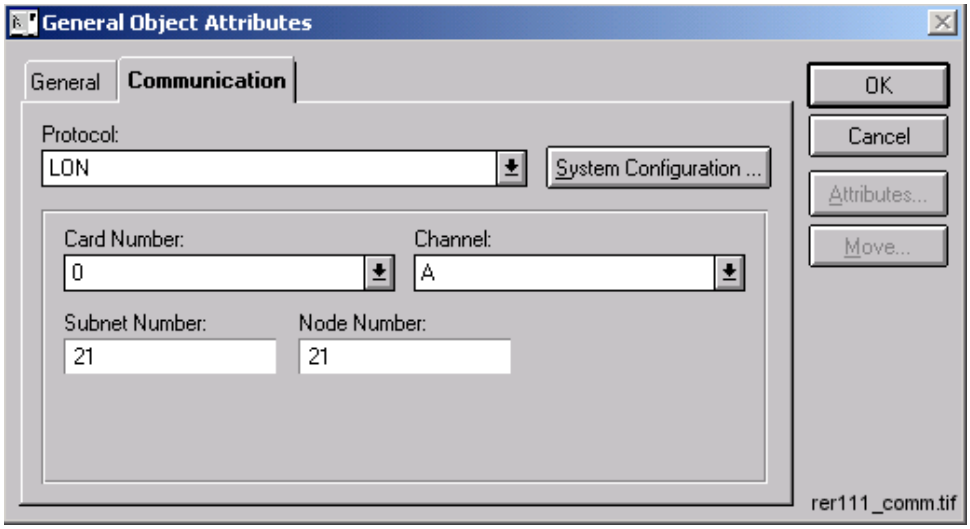

Fig. 3.6.-1 Communication settings for RER 111 objects

The communication settings include:

Card Number	The number of the installed LON adapter.
Channel	The channel of the installed LON adapter.
Subnet Number	A number in range of 1 through 127, inclusive. The value must match with the value assigned to the physical device.
Node Number	A number in range of 1 through 127, inclusive. The value must match with the value assigned to the physical device.

To save the settings, click OK. Otherwise, click Cancel to close the dialog discarding all the changes.

3.7. Using RER 111 with other objects

The procedure for using a RER 111 object is as follows:

1. Insert the RER 111 object to the project.
2. Configure the communication settings of the RER 111 object.
3. Select the RER 111 object and insert the appropriate object under the RER 111 object. If the object's type supports moving objects, move the object under the RER 111 object.
4. Configure object specific settings, if it has not been done previously.

Figure 3.7.-1 illustrates the usage of a RER 111 object in conjunction with a REC52X object.

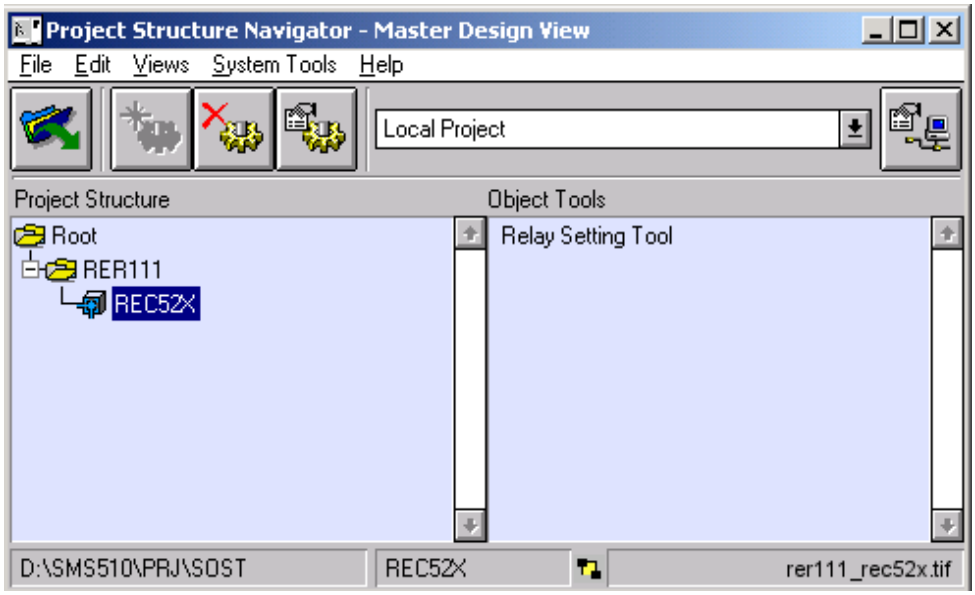

Fig. 3.7.-1 A RER 111 object hosting a REC52X object

An LSG object must be inserted directly under an RER 111 object, i.e. it cannot be moved there. Likewise, once inserted under an RER 111 object, an LSG object cannot be moved to any other location in the tree structure.

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