



SYSTEM 7000



TRANSMITTER GROUPING & BUS SOFTWARE PROGRAMMING INSTRUCTIONS

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Introduction

1.0 This instruction has been produced to enable the Transmitter Grouping and Bus Task to be added to the IRIS. These tasks will enable additional relay output units to be connected onto the IRIS 485 Bus and transmitters programmed into IRIS to be grouped such that they can operate pre-defined relays. The relay output units each have eight additional programmable relays (Part No 6611/B) and a maximum of two relay output units can be connected onto the IRIS 485 Bus.

1.1 The Grouping and Bus task forms an additional feature for the IRIS receiver and is implemented when 7219 software is present in the receiver. The software can be identified by the I.C marking label showing 5CGBV1.0.

Tools & Equipment

2.0 The following tools are required to add the Transmitter Grouping & Bus Tasks:

Item	Purpose
Cross head screwdriver	To gain access to IRIS main PCB
7219 software (5CGBV1.0)	I.C containing grouping & bus task.

Table 1

Sequence of Operation

3.0 Before inserting new I.C ensure that IRIS has been disconnected from all power sources.

Operation	Comments
1 Disconnect 12V power to IRIS receiver	
2 Insert the new device into a spare expansion socket. (A,B,C or D)	<i>Ensure that the cut out on the chip is aligned with the cut out on the chip socket</i>
3 Restore power to the IRIS and observe that IRIS goes through its normal Warm start-up sequence.	
4 Configure the system so that transmitters operate specified relays as required. This can only be carried out from the Engineering Mode	<i>To gain access to the main menu options enter engineering mode.</i>

Configuration Overview

4.0 Each of the transmitters programmed into IRIS can be allocated to a group. There are 16 groups which can then be assigned to make one or more relays operate. This will allow a wide variety of options to be set up where designated transmitters will operate specific relays. By connecting additional relay units each group, can be if required be assigned to its own individual relay output. When the Transmitter Grouping & Bus software task is added additional Main Menu options will be available. The Menu structure for the Grouping & Bus Task is shown in Figure 1. A brief explanation of events, group's outputs and relay configuration can be found at the end of these instructions.

Transmitter Grouping & Bus Menu Structure

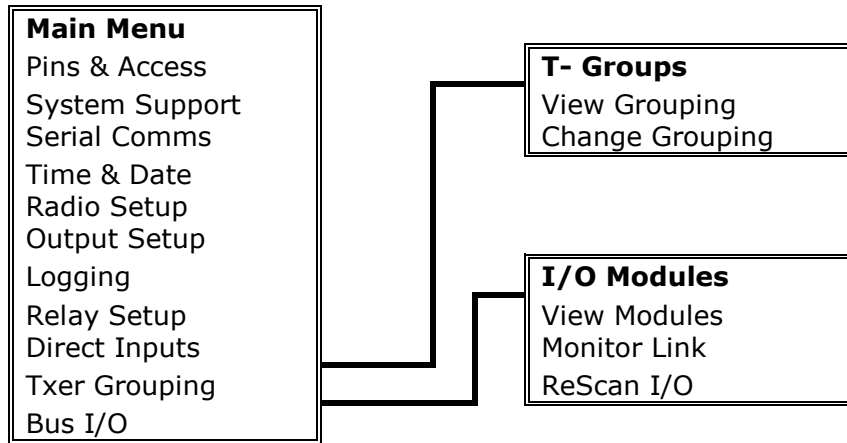


Figure 1

Configuring the System

5.0 Once the Transmitter Grouping and Bus task chips have been added, the Main Menu has two additional options; 'Txer Grouping' and 'Bus I/O'. Selecting the 'Txer Grouping' option causes the display to show two further options; 'View Grouping' and 'Change Grouping' whilst selecting the Bus I/O option causes a further three options to be displayed; 'View Modules', 'Monitor Link' and 'ReScan I/O'.

Setting Bus Communications from IRIS to additional relay units.

5.1 To allow communication between the IRIS receiver and the 6611/B (eight relay units) parameters must be programmed in the IRIS Bus I/O and Serial Comms Menus and switch settings must be set in the 6611/B units themselves.

5.2 The IRIS and 6611/B should be wired as shown in figure 3.

5.3 The communication setup between the IRIS and the 6611/B units should be set as shown in the following step by step guide.

Enter the engineering mode by switching the key to RESET, pressing zero and entering the engineering PIN (Default = 221100). (Note: Entry into the Main Menu may vary depending upon the IRIS setup)

Observe the screen changes to

```

|**  Main Menu  **|
> Pins & Access   <
| System Support  |
2 = Help          14:32
    
```

Scroll down using the ▼ key until Serial Comms is between the > & < chevrons. Then press 1.

Screen will change to:

```

|*   Serial Comms   *|
> Device Table     <
| Re-Start Bus     |
2 = Help           14:32
    
```

Scroll down using the ▼ key until Bus Master Setup is between the > & < chevrons. Then press 1.

Screen will change to:

```

|*   Master Setup   *|
> Polling Baudrate <
| Auto Re-online   |
2 = Help           14:32
    
```

Press the 1 key

A typical screen may change to show:

```

Polling Baud
is 384, Enter rate
(MAX 768 :_
^ = Done v = Del   14:32
    
```

Enter 384 and press the ▲ key. If 384 is already displayed press the ▲ key.

The display will now revert back to show:

```

|*   Master Setup   *|
> Polling Baudrate <
| Auto Re-online   |
2 = Help           14:32
    
```

Scroll down using the ▼ key until Auto Re-online is between the > & < chevrons. Then press 1.

A typical screen may change to show:

```

Auto Re-online
DISABLED
Enable ?
1 = Yes 0 = No     14:32
    
```

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Press the 1 key.

Screen will change to show:

```

Auto Re-online
Now ENABLED

Push any key          14:32
    
```

Press any key. Scroll down using the ∇ key until Port To Use is between $>$ & $<$ chevrons. Then press 1.

A typical screen may change to show:

```

Master port = 0
0 = OFF, 1 = RS485
2 = Pager 232 >_
^ = Done v = Del          14:32
    
```

Enter 1 for RS485 and press the \wedge key.

The display will now show:

```

| Auto Re-online          |
| > Port To Use          < |
| ^^^^^^^^^^^^^^^^^^^^^^^ |
| 2 = Help              14:32 |
    
```

Press the 3 key twice to return to the Main Menu.

Display shows:

```

| ** Main Menu          ** |
| > Pins & Access        < |
| System Support        |
| 2 = Help              14:32 |
    
```

Scroll down using the ∇ key until Bus I/O is between the $>$ & $<$ chevrons. Then press 1.

Display shows:

```

| ** I/O Modules        ** |
| > View Modules        < |
| Monitor Link          |
| 2 = Help              14:32 |
    
```

Scroll down using the ∇ key until Rescan I/O is between the $>$ & $<$ chevrons. Then press 1.

Display shows:

```

Rescan I/O !
Are you sure ?

1 = Yes 0 = No          14:32
    
```

Press 1 key.

Display will now show:

```

Performing Rescan
please wait .....

14:32
    
```

The display will then change to show:

```

Rescan Complete

Push any key          14:32
    
```

Push any key. Then press the \wedge key until View Modules is between $>$ & $<$ chevrons. Then press 1.

The display will then show: (The I/O number shown will depend upon the I/O switch settings)

```

| ** Modules Found ** |
| Remote 8 way I/O    |
| Unit 03, ONLINE    |
| 2 = Help           14:32 |
    
```

Press the 3 key twice to return to the Main Menu.

Transmitter Grouping

5.4 The procedure for viewing, adding and deleting transmitters from groups in the IRIS, is shown in the following step by step guide.

5.4.1 **View Grouping:** As the name suggests selecting this option allows the various Groups to be viewed. There are a maximum of 16 groups available. Enter the engineering mode by switching the key to RESET, pressing zero and entering the engineering PIN (Default = 221100). (Note: Entry into the Main Menu may vary depending upon the IRIS setup)

Observe the screen changes to

	**	Main Menu	**	
>		Pins & Access		<
		System Support		
2 =		Help		14:32

Scroll down using the ▼ key until Txer Grouping is between the > & < chevrons. Then press 1.

	**	T - Groups	**	
>		View Grouping		<
		Change Grouping		
2 =		Help		14:32

Press the 1 key A typical display might be:

	**	T - Groups	**	
>		TGroup No: 1		<
		Event: Alarm		
2 =		Help		14:32

Press the ▼ key Screen will show the current Group 1 status:

		TGroup No: 1		
		Event: Alarm		
		No of Items: 2		
2 =		Help		14:32

Press the ▼ key Screen will show transmitters allocated to the Group:

		Event: Alarm		
		No of Items: 2		
		Handpush 001		
2 =		Help		14:32

Press the ▼ key to scroll through all hand pushes allocated to the Group: ^ arrows indicate the end of the group menu.

		Handpush 001		
		Handpush 002		
		^^^^^^^^^^^^^^^^^^^^		
2 =		Help		14:32

With the T-Group No: between the > and < chevrons use the 1 key to scroll through the 16 groups. When the screen shows the 16th group pressing 1 again will revert to displaying the first group.

5.4.2 **Change Grouping:** Selecting this option allows the various Groups to be altered. There are a maximum of 16 groups available. Each group can have its Event configured. The Event can best be described as the way the group will respond to a signal. The valid options are shown below:

Event Options	Group Response
Alarm	An Alarm signal from any transmitter in the Group.
Local	A Local signal from any transmitter in the Group.
P-Call	A P-Call alarm signal from any Personnel Call Transmitter in the group.
X-Alarm	Any Local or P-Call signal but NOT an Alarm signal from any transmitter in the group.
X-Local	Any Alarm or P-Call signal but NOT a Local signal from any transmitter in the group.
Any	Any signal from any transmitter in the group.
None	No operation

5.5 **Example:** The following example shows in a step by step format how to assign hand push 001 to operate Output 1 (Alarm Relay) on an alarm transmission:-

5.5.1 Firstly the hand push has to be assigned to a T-Group. This is achieved by entering the engineering mode by switching the key to RESET, pressing zero and entering the engineering PIN (Default = 221100). *(Note: Entry into the Main Menu may vary depending upon the IRIS setup)*

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Screen changes to

```

| **  Main Menu  ** |
> Pins & Access      <
| System Support    |
2 = Help             14:32
    
```

Scroll down using the ▼ key until Txer Grouping is between the > & < chevrons. Then press 1.

Screen will change to:

```

| **  T - Groups  ** |
> View Grouping     <
| Change Grouping   |
2 = Help             14:32
    
```

Press the ▼ key

The screen will show:

```

| View Grouping     |
> Change Grouping  <
| ^^^^^^^^^^^^^^^^^ |
2 = Help             14:32
    
```

Press the 1 key

A typical screen display might show:

```

| **  T - Groups  ** |
> Tgroup No: 1      <
| Event : None      |
2 = Help             14:32
    
```

Press the ▼ key until **Event** appears between the > and < chevrons

Screen will show:

```

| TGroup No: 1     |
> Event: None     <
| No of Items: 0   |
2 = Help             14:32
    
```

Press the 1 key and the option shown against Event will change.

Screen will show:

```

| TGroup No: 1     |
> Event: Alarm    <
| No of Items: 0   |
2 = Help             14:32
    
```

Press the ▼ key until the **No of Items** option appears between the > and < chevrons.

The screen will show

```

| Event: Alarm     |
> No of Items: 0  <
| ^^^^^^^^^^^^^^^^^ |
2 = Help             14:32
    
```

Press the 1 key

The display will show a list of the transmitters programmed into the system:

```

| **  Select Item  ** |
> Hand Push 001     <
|-----|
2 = Help             14:32
    
```

With Hand push 001 positioned between the chevrons press the 1 key.

The display will show

```

Saving Data
Please Wait

14:32
    
```

As the transmitter is selected it is added to the group list

The display changes to show:

```

| Event: Alarm     |
| No of Items: 1   |
| Hand Push 001    |
2 = Help             14:32
    
```

Press the 3 key twice to return to the Main Menu.

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5.5.2 Secondly the T-Group has to be assigned to an Output. This is achieved from the Main Menu.

Screen shows:

```
|** Main Menu **|
> Pins & Access <
| System Support |
2 = Help 14:32
```

Scroll down using the ▼ key until Output Setup is between the > & < chevrons.

```
| Radio Setup |
> Output Setup <
| Logging |
2 = Help 14:32
```

Press the 1 key Screen will change to:

```
|** Binary Outputs **|
> Test Outputs <
| Output Latch Times |
2 = Help 14:32
```

Press the ▼ key until **Output On Reasons** appears between the > and < chevrons

```
| Output Permissions |
> Output On Reasons <
| Output Off Reasons |
2 = Help 14:32
```

Press the 1 key. Screen will change to show:

```
Output On Reasons
1 = Change On Reason
3 = Exit / Finish
Push Any Key 14:32
```

Press the 1 key. The screen will change to show:

```
|* Output on Reason *|
> 1 / 'Un-named' is <
| Switched on by |
2 = Help 14:32
```

Press the 1 key The display will show:

```
Edit on Reason
for Output 1
1 = de / select reason
Push Any Key 14:32
```

Push any key The display will show:

```
|* Select on Reason *|
> NOTHING <
|-----|
2 = Help 14:32
```

Press the ▼ key until Txer Group 1 On is displayed between the > and < chevrons.

```
|-----|
> Event : 'Txer Group <
| 1 ON'
2 = Help 14:32
```

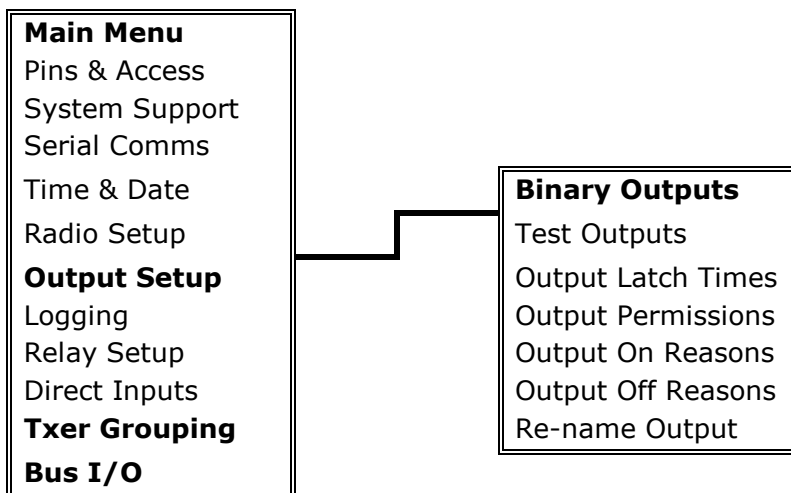
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Press the 1 key: Display will change to show:

```

|-----|
>*REASON*SELECTED*
| Event : 'Txer Group 1 |
2 = Help                               14:32
    
```

Press the 3 key until SYSTEM RESET is displayed. Turn the keyswitch to the Clear position. System Clear should now be displayed. Handpush 001 should now be tested to ensure that only an alarm transmission from this unit operates Output 1(the alarm relay on the IRIS pcb and relay 1 on the 6611/B unit). Further programming of the Output can be selected from the table shown below ,this will enable the time of the outputs operation , the naming of the output etc. to be configured.



5.6 The steps shown above can be repeated for other transmitters and relay configurations. Therefore adding additional transmitters to the groups or changing the event that activates the group. In the block diagram example the transmitters have been grouped and assigned as follows:

			IRIS relays	6611/B relays
Handpush 001	Event: Alarm	Output 1: Txer Group 1 On	Alarm Relay	Relay 1
Handpush 002	Event: Alarm	Output 2: Txer Group 2 On	Relay 1	Relay 2
Handpush 003	Event: Alarm	Output 3: Txer Group 3 On	Relay 2	Relay 3
Handpush 004	Event: Alarm	Output 4: Txer Group 4 On	Relay 3	Relay 4
Handpush 005	Event: Alarm	Output 5: Txer Group 5 On	-	Relay 5
Handpush 006	Event: Alarm	Output 6: Txer Group 6 On	-	Relay 6

This will enable each transmitter to operate an individual relay on an alarm activation.

Example Configuration

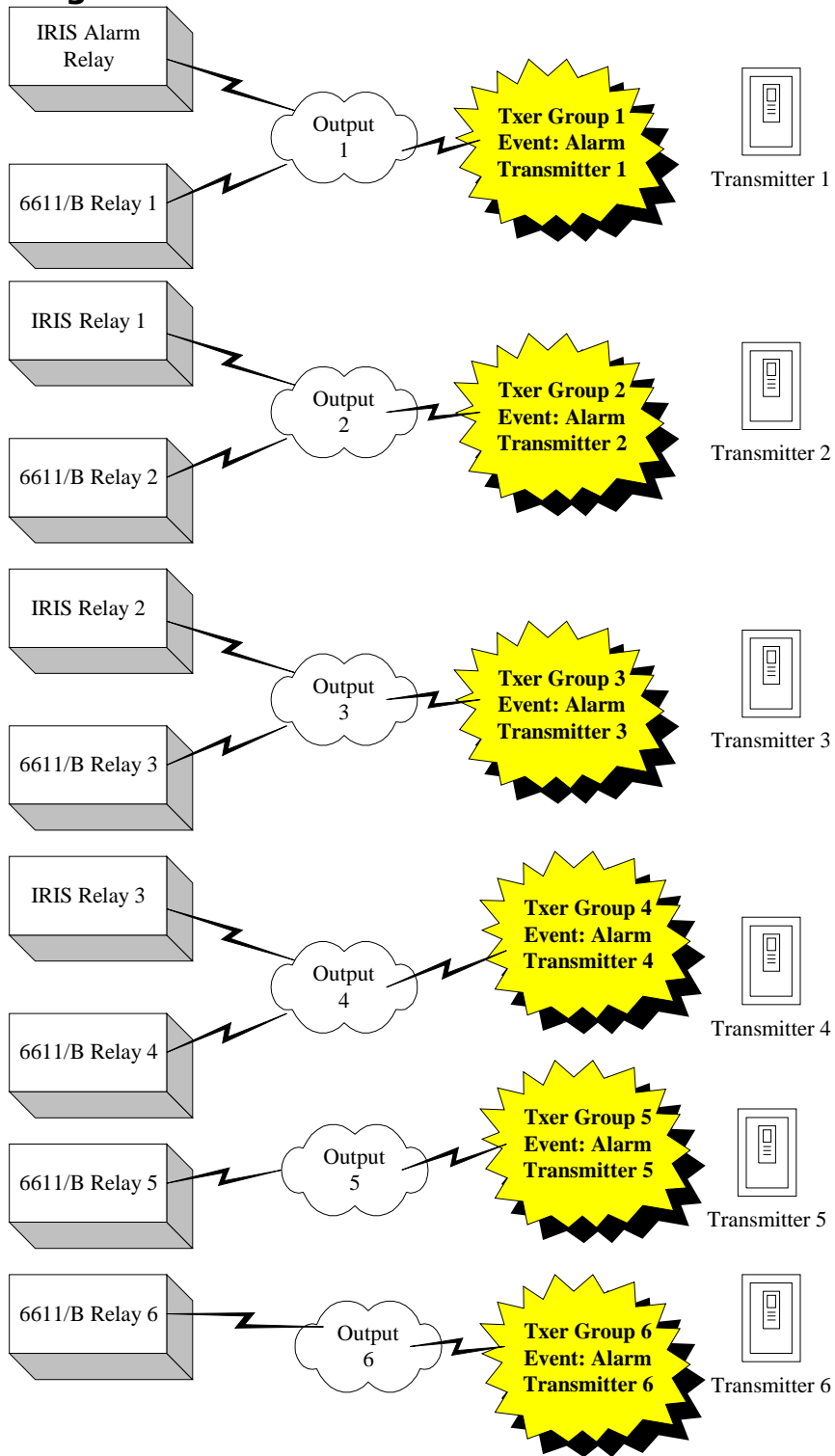


Figure 2

Removing transmitters from T-Groups

5.7 This is achieved by entering the engineering mode by switching the key to RESET, pressing zero and entering the engineering PIN (Default = 221100). (Note: Entry into the Main Menu may vary depending upon the IRIS setup)

Screen changes to

```

| **  Main Menu  ** |
> Pins & Access      <
| System Support    |
2 = Help             14:32
    
```

Scroll down using the ▼ key until Txer Grouping is between the > & < chevrons. Then press 1.

```

| **  T - Groups  ** |
> View Grouping     <
| Change Grouping   |
2 = Help             14:32
    
```

Press the ▼ key

The screen will show:

```

| View Grouping     |
> Change Grouping  <
| ^^^^^^^^^^^^^^^^^ |
2 = Help             14:32
    
```

Press the 1 key

A typical screen display might show:

```

| **  T - Groups  ** |
> Tgroup No: 1      <
| Event : Alarm     |
2 = Help             14:32
    
```

Press the ▼ key until the handpush to be deleted appears between the > and < chevrons.

If handpush 001 is to be deleted the screen should show:

```

| No of Items: 1    |
> Handpush 001     <
| -----          |
2 = Help             14:32
    
```

Press the 1 key

The display shows

```

Hand Push 001

Delete ?
1 = Yes 0 = No      14:32
    
```

Press the 1 key and the transmitter selected (in this case 001) is deleted.

Screen will show:

```

| Event: Alarm     |
> No of Items: 0   <
| ^^^^^^^^^^^^^^^^^ |
2 = Help             14:32
    
```

Testing

6.0 To ensure that the outputs have been set up correctly, connect a multimeter across the relay changeover contacts set to the ohms range and check that only the expected relays change state when transmitters generate their respective Alarm and Local signals.



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