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Revision 3.0M 1/92

QINGEN-112

PROFESSIONAL CHARACTER GENERATOR

GETTING STARTED

INTRODUCTION

Congratulations on your purchase of the QINGEN-112 character generator. You have made a smart choice as the QINGEN-112 is the most versatile. and best of all. easy to use character generator available today.

The <u>Owners Manual</u> is divided into 2 sections. The first is a detailed tutorial that will show you step by step how to create your firstpage, familiarize you with some of the most commonly used commands and show you how to turn off the Sample pages. This first section of the Owner's Manual will help you begin using your QINGEN-112 immediately. If you have never used the QINGEN-112 before, We strongly suggest that you read this section as it has been designed to help you get started quickly and easily.

The second section of the manual is the Reference Guide which describes all commands, all functions and graphics in detail. If you are already an experienced user of Character Generators and are accustomed to using page attributes commands. font sizes. etc then you may want to skip section one.

DEMONSTRATIONS

Your new QINGEN-112 has been pm-loaded with 25 sample pages. The next section describes how to install and view these pages. Take a few minutes to watch this display. ii will demonstrate some of the features and capabilities of your new Character Generator.

WHAT YOU WILL NEED

<u>You will need a monitor</u> (or a modulator for use with a regular television.) Your QINGEN-112 includes: 1) a Main Control Unit, 2) a Keyboard. and 3) this Owners Manual.

SYSTEM INSTALLATION

- 1) First, plug the Keyboard into the Control Unit. (See diagram on following page)
- 2) Then. plug the Monitor into the Program Output.
- 3) Now. plug Power Cord into the wall socket.

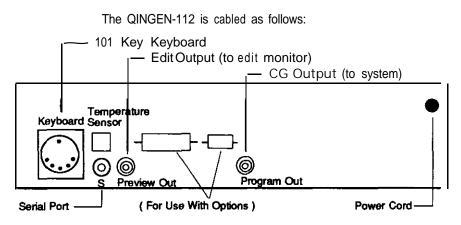
SECTION ONE GETTING STARTED

That's it! You should now see the built in sample pages on the screen.

WARNING (WARNINGI!! Never connect or disconnect the keyboard with the power cord plugged in. Doing so will damage your pages.)

SYSTEM INSTALLATION DIAGRAM

The QINGEN-112 is a rack mountable unit with attached 101 key X/AT compatible keyboard. The system should be maintained in an environmentally controlled area free from heavy traffic and excessive dust.



EDITING

Now that you have seen the sample pages, we will be making a couple of your own custom pages. But first lets get familiar with the Function Keys. We'll practice using these Function Keys by editing pages that have already been installed for you. Let's start by turning the sample pages off so that after you enter your own pages the sample pages will no longer appear. To do this follow steps 1 through 4.

1. CONNECT YOUR MONITOR TO THE PREVIEW (edit) OUTPUT.

You should see a blank page. This area is known as the CG WORKSPACE. The CG Workspace is like an artist canvas before it is framed and displayed.

2. PRESS THE SCROLL LOCK KEY.

(The reason for this will be explained later). When you press this key the indicator light on the right side of the computer should come on and stay on. If not press the scroll lock again.

3. FUNCTION COMMANDS.

At the top of the keyboard you will see a blue template labeled "Function Commands". This template will make it easy for you to remember which keys to use for changing colors. changing text (font sizes), etc. Let's begin with the [F1] VIEW key.

PRESS THE KEY MARKED [F1].

You should now see a black box in the middle of the screen. Review the information in the black box.

4. TURN OFF SAMPLE PAGES

The QINGEN - 112 has been pre-loaded with the pages you viewed earlier. These were loaded in pages 88-I 12. To find these pages :

(4-A) PRESS THE DOWN ARROW KEY ONCE.

(Be sure you pressed the [F1] key as described in previous step.) Read the information in the middle of the screen.

Do you remember this page from the demonstration you viewed earlier? Notice that the WINDOW (the information box in the middle of the screen) states " DISPLAYING PAGE 112 ".

(4-B) PRESS THE DOWN ARROW KEY AGAIN UNTIL YOU REACH PAGE 88.

You should now see : " THE QINGEN-112 ... "

This is the first page in the Series of 25 sample pages. We want to turn these demonstration pages off so that you can enter and display your own pages.

(4-C) PRESS THE ENTER KEY. (Window disappears).

PRESS THE [F3] PGAT (PAGE ATTRIBUTES) KEY. Review various information on the screen.

(4-D) PRESS THE LEFT ARROW KEY ONCE.

Notice this changed the DWELLTIME. The DWELL TIME is telling the computer how long page 88 will be displayed before making the transition to the next page.

(4-E) PRESS THE 🗲 LEFT ARROW KEY (6 MORE TIMES)

to change current dwell time from '7 seconds' to 'Page is Off".

PRESS [F2] KEY.

PRESS

SECTION ONE . GETTING STARTED

What you have done is changed page 88, saved the change, and turned it off so that it is no longer displayed in the sequence on the program output. Let's turn off some more pages.

(4-F) PRESS THE [F1] KEY.
PRESS THE UP ARROW KEY.
(Display should now be page 99.)
PRESS THE E E ENTER KEY.
PRESS THE [F3] KEY.
PRESS THE E EFT ARROW KEY
Until DWELL TIME reads "PAGE IS OFF".
PRESS THE [F2] KEY.

PRESS THE ENTER KEY. (Now we have turned off page 99 also.)

- (4-G) REPEAT ALL STEPS IN (4-F) TO TURN OFF ALL PAGES UP TO 111. (Do not turn off page 112.)
- (4-H) CONNECT MONITOR TO PROGRAM OUTPUT. Only one page will be displayed with the crawl line.

TURN OFF THE SCROLL LOCK KEY.

Press the scroll lock key, the indicator light on the keyboard should go off. You should see only one page continuously displayed with the crawl line moving. (If the crawl line is not moving, turn off the scroll lock key. Indicator light should be off.)

If you see more than one page sequencing, then you missed a few steps somewhere. Make a note of the pages which did not get turned off and go back through the steps in (4-F) until you have turned off all pages except page 112. Be sure you press the scroll back key and connect your Monitor to the Preview Output.

5. CREATING A CUSTOM PAGE

Now that you have turned off the sample pages. you have had some practice with the Function Keys. Let's enter a page from scratch.

- (5-A) TURN ON SCROLL LOCK (Indicator light should be on). Be sure your monitor is plugged into the Preview Output.

Begin entering any type of text you wish. For example type: THIS IS Let's center this line.

- HOLD DOWN THE [ALT] KEY (next to space bar) + FILE + AND AT THE SAME TIME PRESS THE [ENTER] KEY. (5-C) (Notice the text was centered.)
- (5-D) Let's make the next line a different color. At the top of the keyboard there is a row of keys called Function Keys. A Blue Template is provided above these keys as a quick reminder of what each is used
- PRESS THE [F 6] KEY. (5-E) Notice that this changes the color of the little box (cursor) on the left side of the screen.
- Type: TEST (5-F)

for.

PRESS AND HOLD [ALT] KEY THEN PRESS [ENTER] KEY, (Centers Text) PRESS ENTER KEY TWICE. Now let's change the font size.

(5-G) PRESS THE [F8] KEY ONCE. (Notice the cursor changes size.)

Type: SCREEN

Now let's use both the COLOR [F6] and the SIZE [F8] keys again. Press the [F6] key 16 times and watch the colors change on the cursor. This will show you the sixteen different colors that can be used at any time. Pick a color you like best. Now press the [F8] key 4 times and watch the size change 4 times. Now;

PRESS [F8] UNTIL THE CURSOR CHANGES TO SECOND SMALLEST SIZE. PRESS SPACE BAR ONCE. Type: PAGE 1

You have learned how to use some of the common functions of the

SECTION ONE . GETTING STARTED

OINGEN-112 like colors, font size, and centering text, and you have designed your first page. Now let's save it to page one and view it on the Program Output. We will be using the same commands we practiced earlier to turn off the sample pages.

6. GETTING YOUR CREATION TO DISPLAY IN THE PROGRAM SEQUENCING.

In order for you to have your page displayed in the program sequencing, you must tell the computer on what page you want to display your creation. Whatever page you choose will erase anything that was formerly on that page. Therefore it is wise for you to choose a certain page BEFORE you start designing one. This will ensure that after you create your new page you will not erase one that you wanted to keep. This was done above in step 5-B. After we pressed the [F1] VIEW key, we pressed the **(**P UP ARROW key to get to our first blank page (Pg.1). Now, when we tell the computer to place our TEST PAGE on page 1, it will be erasing a blank page. If we, instead, tell the computer to place this test page on Page 112. this will erase the current information with the TEST PAGE that we just designed.

(6-A) PRESS THE [F3] KEY

A menu appears with the first line highlighted. This section is where you tell the CG how long you want the page to appear. whattypeof pagetransition, if the crawl line will appear or not. etc. Look at the first line of this menu, it reads; "DWELL TIME..... PAGE IS OFF".

(6-B) PRESS ME → RIGHT ARROW KEY ONCE.

Notice now that the DWELL TIME has been changed to 1 second. Each time you press the key the seconds increase. This can be done up to 99 seconds.

(6-C) PRESS THE → RIGHT ARROW KEY A FEW MORE TIMES. SET DWELL TIME.

Press the **LEFT** ARROW key. Notice that this decreases the Dwell Time. Now press the **DOWN** ARROW key. Notice this moves the highlighted section to the next menu selection. By using the UP and DOWN ARROW keys you can move about the menu to highlight the item you wish to set or change. Then. using the LEFT ARROW key and the RIGHT ARROW key. you make the actual changes to that menu selection. Now let's set the dwell time to 6 seconds. Using the **P** UP ARROW key. highlight the DWELL TIME selection. Now press the **LEFT** ARROW key until 6 SECONDS appears.

Now lets save the page we designed to Page 1 along with the page attributes information (such as Dwell Time).

(6-D) PRESS THE [F2] KEY

You have now reached the menu that allows you to save this information on what ever page you wish. Notice the Screen Says

DISPLAYING PAGE 1. WRKSPC FROM PAGE 1.

This is telling us that we have edited page 1 and will be saving the new information to page 1.

- (6-E) PRESS THE ENTER KEY The screen we designed now returns.
- (6-F) TURN OFF THE SCROLL LOCK KEY (Indicator light off).

PLUG MONITOR INTO THE "PROGRAM OUT" PORT

Now we have saved the page we designed and it will appear along with the one sample page (page 112) that we did not turn off. After unplugging the monitor from the Preview Output and connecting the monitor to the Program Output. you will now see your page included with the demo page. (Note that you may have to watch several pages before your page appears if you did not turn off the sample pages as described in step 4.)



This is the end of the introductory portion of this manual. You have learned all of the most important commands you need to create and display your work. Section 2. the "Reference Section". contains further instructions for Function Commands and greater detail on the use of graphics tools.

REFERENCE

The QINGEN-112 is an easy to use 112 page character generator (CG) which utilizes sophisticated effects found in high end CG's. The QINGEN-112 blends versatile graphics, bold colors, a free format canvas, powerful edit commands. various page transitions and crawl messages which may be included with any screen. This combination provides the user with an effective, yet simple, method to reach their viewers.

The system incorporates 7 crawl messages which may be specifically assigned to any *or* all pages. The pages are displayed sequentially, each with independent dwell times and transitions.

Your new QINGEN-112 has been ore-loaded with 25pages, We suggest that you take a few moments to watch display, since it will demonstrated some of the features and capabilities of your new Character Generator. This can be done by pressing the [F12-DEMO] key, then press [2], then press [RETURN] Refer to page 10 for further instructions on using the Demo feature.

SYSTEM INSTALLATION

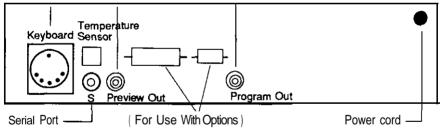
The QINGEN-112 is a rack mountable unit with attached 101 key X/AT compatible keyboard. The system should be maintained in an environmentally controlled area free from heavy traffic, and excessive dust.

The QINGEN-112 is cabled as follows:

101 Key Keyboard



CG Output (to system)



Once the QINGEN-112 is wired correctly and the power is on, the preview monitor will display the CG *Workspace* and default to the information saved on page #1.

WE STRONGLY SUGGEST using the SCROLL LOCK for increased editing speed. Engage the Scroll Lock as you begin editing by pressing the [SCROLL LOCK] key and disengage it immediately after editing. (The Scroll Lock Indicator Light will be on indicating it is locked.) See page 15 for more detailed instructions.

CG WORKSPACE

The CG *Workspace* represents the canvas for the OINGEN-112. All edits are accomplished through the CG *Workspace*. Any page may be retrieved from memory and displayedon the CG *Workspace*. Once displayed, a page may be edited and then Saved to memory.

DEMONSTRATION

The OINGEN-112 has a built in Demonstration. The Demo is a series of ten pages highlighting the various colors, graphics and page transitions, including the crawl message and time displays. Any of these pages may be captured and altered through the CG *Workspace* and then saved to a page in memory

The DEMO is selected from the CG Workspace by pressing [F12]-DEMO]. This keystroke changes the screen to the Demonstration Menu. The user then has the following options:

- 1. SHOW THE USER PAGES ON THE PROGRAM SCREEN ONLY. (Normal PROGRAM output)
- 2. SHOW THE USER PAGES ON PREVIEW 8 PROGRAM SCREENS. (Runs existing pages on PROGRAM output & PREVIEW (edit) monitor)
- 3. SHOW BUILT IN PAGES ON THE PROGRAM SCREEN ONLY. (Runs the 10 Demo pages through the PROGRAM output)
- SHOW BUILT IN PAGES ON PREVIEW & PROGRAM SCREENS (Runs the 10 Demo pages on PROGRAM Output 8 PREVIEW (edit) monitor)

{ See next page for more detailed explanations of these options }

As with any menu screen of the QINGEN-112, the Demonstration Menu includes a topic specific HELP screen. The HELP information may be accessed at any time from the Demonstration Menu by pressing the [Esc] key.

In **order** 10 view any of the demonstrations, the user must remember to turn the SCROLL LOCK OFF (press the [Scroll Lock] key so the Scroll Lock Indicator Light is off). Likewise, to resume normal editing after viewing a demo, the user should activate the SCROLL LOCK (press the [Scroll Lock] key so the Scroll Lock Indictor Light is on).

When the Demonstration Menu is displayed, the current selection will be highlighted in "green". The selection can be changed by pressing the cursor up or down keys. Once highlighted, the selected demonstration can be activated by pressing the [Enter] key. The demo is cancelled by pressing any other key.

SECTION TWO . REFERENCE

- Options -

THE FIRST AND SECOND OPTIONS - <u>DISPLAY THE USER PAGES</u> (created or transferred to the usable pages in memory). If selected, either one of these options will run the current user pages starting with the page last SAVED or VIEWED through the CG Workspace. Your unit has been pre-programmed with 25 sample pages. These are the ones you viewed when the unit was first installed.

THE FIRST OPTION - <u>SHOW THE USER PAGES ON THE PROGRAM SCREEN</u> o n l y is the normal running mode. This option is highlighted when the Demonstration Menu is accessed and when the user returns back to the CG Workspace (by pressing any other key from the Demonstration Menu).

THE SECOND OPTION - SHOW THE USER PAGES ON PREVIEW & PROGRAM <u>SCREEN</u>, allows the user pages to be viewed through the PREVIEW (edit) monitor. This is a convenient method of viewing the page transitions.

THE LAST TWO OPTIONS - <u>DISPLAY THE TEN BUILT IN DEMO PAGES</u> pages are fired in the system and cannot be lost or altered as part of the demonstration. However, any of these pages can be copied to the CG Workspace, then altered and SAVED as a normal page.

OPTION NUMBER THREE — <u>SHOW BUILT IN PAGES ON THE PROGRAM</u> <u>SCREEN ONLY</u>. displays he demo pages through the PROGRAM output instead of the normal user pages. Once the user returns to the CG Workspace. the demo is canceled and PROGRAM output resumes its normal display.

THE FOURTH OPTION - <u>SHOW BUILT IN PAGES ON PREVIEW & PROGRAM</u> <u>SCREEN</u>, displays the demo pages through the PREVIEW (edit) monitor. The demo will scroll through each of the ten pages and repeat. At any time the user can freeze a page orstopthedemo by hitting any key. This keystrokeoverlaysthe screen with the message:

"PRESS [Enter] TO CAPTURE THIS SCREEN INTO THE WORKSPACE PRESS ANY OTHER KEY TO RETURN TO THE DEMONSTRATION MENU"

By pressing the [Enter] key the current demo page will be transferred to the CG Workspace. Once in the Workspace, the page can be edited and SAVED as a normal page in memory. NOTE: By capturing a Demo Page, any current information in the CG Workspace will be Lost! Save any important information in the workspace to a page prior to accessing the Demonstration Menu (**[F12-DEMO]** from the CG Workspace).

The user can cancel any demonstration and return to the CG Workspace by pressing any key.

FUNCTION COMMANDS

F1 -VIEW	VIEW PAGE	Load page from memory. NOTE:Any un-saved changes made to the workspace will be lost by Viewing a new page from memory.
F2- SAVE	SAVE PAGE	Save current workspace to page location in memory. NOTE: Saving a CG Workspace to a page location will eliminate the existing page to that location.
F3 - PGAT	PAGE ATTRIBUTES	Access page Attributes screen.
F4 - CRWL	* CRAWL	Edit Crawl Message(s)
F5 - SACK	* CHARACTER BACKGROUND	Change the background color of individual characters by incrementing through a series of 16 colors.
F6 - FORE	* CHARACTER FOREGROUND	Change the foreground color of individual characters by incrementing through a series of 16 colors.
F7 - DROP	* SCREEN BACKDROP	Change the border color by incrementing through a series of 16 colors.
F8 - SIZE	* FONT SIZE	Change font size by incrementing through a series of 4 font sizes.
F9 - TIME	CHANGE TIME	Enter correct time and date.
F10 - COMM	COMMUNICATIONS	Transfer pages between two QINGEN-112s
F11 · VCRS	VCRCONTROL (N/A version 1.X)	Access VCR scheduling control
F12 - DEMO	QINGEN-112 DEMO	Series of pages explaining some of the features of the system.
ESC	HELP	Explanation of all edit and function commands used in the CG Workspace.
	1	

Holding the [Ctrl] & [Alt] Keys and pressing (DELETE) will reset the OINGEN-112.

* Decrement order by holding the [Alt] key while pressing function key.

SECTION TWO - REFERENCE

COLOR FUNCTIONS

On first edit, the system displays an otherwise blank screen with a two color cursor. This two color cursor represents the current background (outer block) and foreground (innerblock) character colors. Both the background and foreground color can be changed by pressing the corresponding function key (F5-BACK: background and F6-FORE: foreground). The color selection order is as follows:

Holding [Alt] 8 pressing F-Keys will decrement order.

- 1. Transparent
- 2. Black
- 3. White
- 4. Gray
- 5. Purple

6. Dark Blue
 9. Light Green
 10. Medium Green
 11. Dark Green

7. Medium Blue

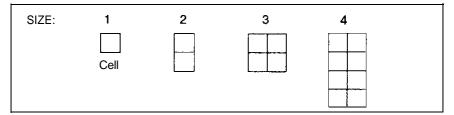
12. Light Yellow

- 13. Dark Yellow
- 14. Light Red
- 15. Medium Red
- 16. Dark Red

6. Cyan

The TRANSPARENT selection displays the backdrop color. it is important to distinguish that the background and forground are only for a particular character, whereasthe backdrop represents the entire screen and border. The backdrop color may be changed by pressing F7-DROP.

The QINGEN-112 incorporates four (4) different character (font) sizes which can be selected by pressing F&SIZE. The smallest size is referred to as a "cell". The three additional sizes are shown in proportion to a cell in the diagram below



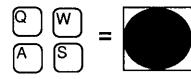
The CG employs a free format canvas. giving the user unrestricted movement and character placement on each page, as well as individual cell foreground and background color combinations. The screen is 32 columns wide and 24 rows long (32 x 24 cells).

Any of the keyboard's letters, numbers or symbols may be typed onto the screen. However, all letters will be displayed in upper case. In addition to these characters, thesystem includes 32 customized graphic characters anyofwhich may be typed into the CG using the 4 font sizes.

Thegraphiccharacters are indexed in this manual on page 22 and in the HELP screen **accessed** from the CG Workspace (press [ESC] Key-HELP). A graphic Key

character is typed onto the screen by holding the [Aft] key and pressing the associated letter or symbol (see graphics index). Different designs may be created by piecing several graphic characters together. For example, a circle can be developed by typing the following:

Hold [AH] and press -*(next* line) Hold [Alt] and press -



(See Page 22, reference.)

CREATING PAGES - EDIT COMMANDS

Naturally, the system includes EDIT COMMANDS to aid the user in manipulating the information typed into a CG page. Listed below and on page 21 (as well as in the HELP screens) are all the EDIT COMMANDS and GRAPHICS CHARACTERS with the associated strokes.

SCREEN CO Key si Hold &	troke	Resulting Effect
[Shift] [ALT] [ALT] [ALT] [ALT]	[PrtSc]	Clear screen Move screen right Move screen left Move screen up Move screen down
LINE COMMA [ALT] [ALT] [ALT] [ALT]	NDS [DELETE] [INSERT] [ENTER] [Tab] [ENTER]	Delete line Insert line Center a line 'Paint Line: changes foreground and color of current line. Go to front of next line.
(continued ne	ext page)	

CHARACTER COMMANDS		
Hold I	Press	Resulting Effect
	•	Move cursor right 1 character Move cursor left 1 character Move cursor up 1 character
	Ð	Move cursor down 1 character
[Ctrl] [Ctrl] [Ctrl] [Ctrl]		Move cursor right 1 cell Move cursor left 1 cell Move cursor up 1 cell Move cursor down 1 cell
[Alt] [Ctrl]	[Delete] [Insert] [Backsp] [Space] [Space]	Delete 1 character Insert 1 character Backspace Paint character: Change foreground and background color of character Alternates foreground & background color
[Esc] [Alt] [Ctrl] [AH]	HELP [Esc] [Delete]	HELP - Graphics Characters Resets Systems

"PAINT" is an unusual feature included in the QINGEN-112. It allows the user 10 change the background and foreground colors of acharacter or entire line with one keystroke. The background and foreground of a character can be changed by holding the [Alt] key and pressing the [Spacebar]. An entire line can be altered by holding the [Aft] key and pressing [Tab].

NOTE: Page transitions of a running QINGEN-112 will periodically delay key strokes when editing the Workspace. WE RECOMMEND pressing the [Scroll Lock] key (indicated by the Scroll Lock Indicator Light on keyward) <u>before editing</u> the Workspace to suspend page transition. In order to resume normal page transitions after editing. press the Scroll Lock Key again (Scroll Lock Indicator Light will now be off.

PAGE ATTRIBUTES

Each page created in the CG *Workspace can* have. independent "attributes" including dwell time, page fade-in and fade-out transitions, and crawl message and time display inclusion. The PAGE ATTRIBUTES are assigned by pressing F3-PGAT. This FUNCTION COMMAND will display the PAGE ATTRIBUTES format (shown below).

PAGE	ATTRIBUTES	
Dwell time Fade in type Fade in speed Fade out type Fade out speed Crawl message Crawl speed Clock display	1 second Top to bottom Slow Top to bottom Slow Off Slow Off	
PRESS ANY KEY TO RETURN		

While this screen is displayed, the HELP information is specific for the PAGE ATTRIBUTES (press [Esc] Key-HELP).

The cursor keys up 1 and down \biguplus select an attribute. The cursor keys left \biguplus and right \biguplus change the selected attribute.

- DWELL TIME: The amount of time a page will be displayed. Each page can be set from 0 seconds (PAGE IS OFF) up to 99 seconds.
- FADE IN TYPE: Indicates type of introduction transition for a page. The transition types include: Top to Bottom. Bottom to Top, From the Center, From the Edges, Small Blinds Open, Small Blinds Closed. Large Blinds Open, Large Blinds Closed.
- FADE IN SPEED: Speed of introduction transition for a page. The FADE IN SPEED must be specified as SLOW or FAST.
- FADE OUT TYPE: Indicates type of exit transition for a page. The FADE OUT TYPE does not have to be specified (NONE) or may be one of the page transition types listed above.

FADE OUT SPEED: Speed of exit transition for a page. The FADE OUT SPEED must be specified as SLOW or FAST.

SECTION TWO . REFERENCE

- CRAWL MESSAGE: Assigns a CRAWL MESSAGE to a CG page. The Page Attributes specify a CRAWL MESSAGE for a page with: NONE, #I, #2, #3, #4, #5, #6, #7. Each CRAWL MESSAGE may be assigned to any number of CG pages. Creating a CRAWL MESSAGE is described on page 19.
- CRAWL SPEED: The speed a CRAWL MESSAGE scrolls across the screen. There are two options, SLOW or FAST.
- CLOCK DISPLAY: Time of day display which may be incorporated with any CG page. This display must be either ON or OFF.

Both the CLOCK and the CRAWL MESSAGE generated by the QINGEN-112 use normal edit lines on the bottom of a page. The user should experiment with both of these features before incorporating them in a final page version.

Once the PAGE ATTRIBUTES are established the user can return to the CG *Workspace* by pressing any other key.

VIEW A PAGE

The [F1-VIEW] function allows the user to view any CG page stored in memory or one of the built-in "Templates". When the [F1-VIEW] is pressed, the CG *Workspace* is replaced by a user page (starting with the last one viewed). The center of the screen will display the green overlaid message:

The user selects a page to view by pressing the cursor key up for down J By holding the [Alt], [Shift], or [Ctrl] key while pressing the cursor key, the user can scroll rapidly through the pages (14 per key stroke). Each viewed page is displayed behind the above message with the corresponding page number (xx above). The displayed page is loaded into the CG *Workspace as soon as* the [Enter] key is pressed.

The selected page will be loaded over the current CG Workspace, therefore a current CG Workspaceshould be saved to a page before accessing the VIEW option. The VIEW option can be cancelled by pressing any other key.

TEMPLATES

The OINGEN-112 incorporates several graphics templates which may be utilized in page creations through the CG *Workspace*. From a clear workspace, the user can

select a TEMPLATE by pressing the [FI-VIEW] key twice. Once in the VIEW A PAGE screen and VIEW A TEMPLATE screen. the screen display for VIEW A TEMPLATE is a blue overlaid message similar to the VIEW message. With the exception that the first line "DISPLAYING PAGE XX" which is replaced by the line "DISPLAYING TEMPLATE XX". The templates are displayed as the background to the template message and can be changed by cursoring up or down. Once a template is selected, it is captured into the CG Workspace by simply pressing the [Enter] key. As with the VIEW process, loading a TEMPLATE into the CG Workspace will eliminate anything in the current CG Workspace. To avoid permanent loss, SAVE the current workspace to a page prior to capturing a template.

SAVE A PAGE

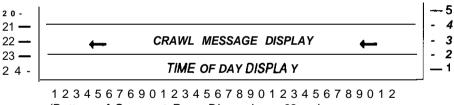
In order to SAVE the CG workspace to a page in memory, the user presses the [F2-SAVE] key *from* the CG Workspace screen. The screen display is similar the VIEW A PAGE screen. The overlay message is red and instructs the user to "PRESS [Enter] to SAVE PAGE". The specific page is selected by pressing the cursor up or down key. As with the View a Page screen. each page is displayed on the screen background while scrolling through the user pages. The CG Workspace is then Saved by pressing [Enter].

IMPORTANT

Saving a page will store the current CG Workspace to that page and will eliminate the previously saved information on the page. Pressing any other key will cancel the save command.

CRAWL MESSAGE

Depending on the configuration of the QINGEN-112, up to seven separate CRAWL MESSAGES can be created from the CG Workspace. Each CRAWL MESSAGE may contain up to 448 characters. The message(s) will be in the smallest font size (one cell). Each message will have one selected background and one selected foreground color. A CRAWL MESSAGE will be displayed with a page on the twenty-second row with a border on both the twenty first and twenty third rows (see diagram below). The message appears from the right side of the screen and scroll to the left side, and will repeat at the conclusion of the message until the end of the page 'dwell time''.



(Bottom of Screen / Page Dimensions: 32 columns x 24 rows)

- Enter the Crawl Editor -

Each CRAWL MESSAGE is created through the CRAWL EDITOR which is accessed from the CG Workspace by pressing [F4-CRWL]. This key stroke will display a prompt on the screen warning the user that "ANY UNSAVED CHANGES MADE TO THE CG WORKSPACE WILL BE LOST BY ENTERING THE CRAWL EDITOR". By pressing [ENTER] the CRAWL EDITOR screen will appear. If the current CG Workspace has not been saved, the user may press any key to return to the CG Workspace and then proceed with [FBSAVE].

The FUNCTION COMMANDS which are still active for Crawl *Editor are* displayed at the bottom of the screen. These commands are as follows:

ESC -HELP	F1 · VIEW	F2 - SAVE
F4 RETURN	F5 BACK	F6 - FORE

-Create a Crawl Message -

The message is typed in the manor it is to be displayed without any special characters or commands. Selecting the background and foreground color is accomplished by pressing the respective [FS-BACK] or [F6-FORE] function keys. The color selection is in the same order as in the CG Workspace. The <u>transparent color</u> will display the backdrop color of any assigned page for the **particular** CRAWL MES-SAGE.

If a message is less than 192 characters. the system will ignore the remaining black spaces. The Crawl Editor utilizes line wrap when typing the message, but not for the insert or delete functions.

-Save a Crawl Message -

To return to the CG Workspace. the user may SAVE the current CRAWL MESSAGE by pressing (FBSAVE] and then following the screen instructions. or by pressing [F4-RETURN]. However the [F4-RETURN] eliminates any changes made in the Crawl Editor.

After a CRAWL MESSAGE is created and saved, it may be assigned to a specific CG page from the Page *Attributes screen*. The Page *Attributes screen* is entered from the CG Workspace by pressing F3-PGAT. A further description can be found on page 16.

SET AND CHANGE TIME

The QINGEN-112 has a built in battery backed real time chip which automatically calculates weekdays and leap years. The lithium battery prevents the loss of time due to power failure and allows the system to reset upon recovery. However, it is necessary for most users to change the displayed time at least twice a year for day-light savings.

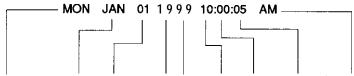
TO SET THE TIME



- 2. CHANGES the SELECTION
- 3. **1** INCREMENTS or DECREMENTS
- 4. PRESS ANY OTHER KEY TO LEAVE

NOTE: Day of the Week and AMPM are adjusted Automaticlly.

Date and Time Display



Day of the Week, Month, Day, Century, Year, Hour, Minute, Second, AM/PM

The \bigcirc or \bigcirc keys will highlight the different categories (Day of the Week. Month, etc.) by changing the color of the selected category from white to green. The highlighted category may be incremented by pressing the \bigcirc key or decremented by pressing the \bigcirc key. When the correct time and date have been entered, the user will press any other key to return to the CG Workspace.

As noted on the screen, THE DAY OF THE WEEK (Sunday-Saturday) and the AM/PM will change automatically when the date or hour is adjusted. The user access these categories.



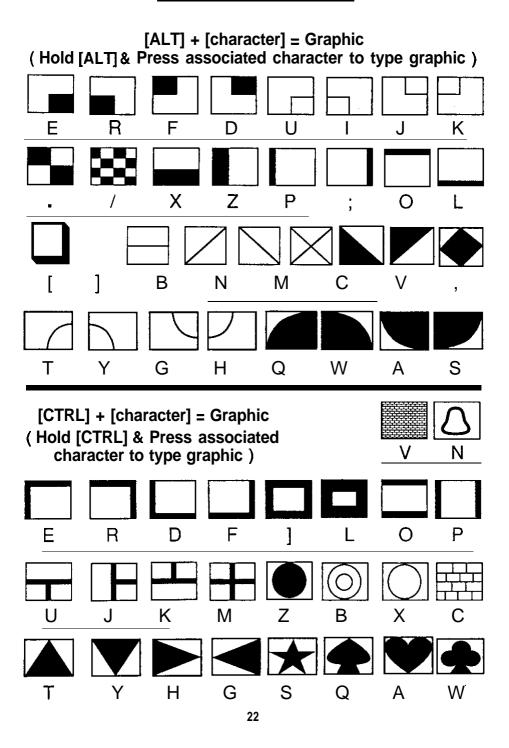
We hope you enjoy your QINGEN-112 unit. We appreciate any comments or suggestions you may have regarding the instructions presented in this manual.

For more information about other available options contact your Qintar representative.

EDITOR FUNCTIONS and COMMANDS

F1 -VIEW: F2 -SAVE: F3 - PGAT F4 - CRWL F5 - BACK F6 - FORE F7 - DROP F8 - SIZE	View Page Save Page Page Attributes * Crawl * Character Backgro * Character Foregro * Screen Backdrop * Font Size	ound EBC Display Help Screens	
[*] F-Key. Incren [Ctrl] [Aft] [Del	['] F-Key. Increment Color, # or Size [Ctrl] [Aft] [Delete] - Resets Systems		
HOLD	& PRESS	RESULTING EFFECT	
SCREEN C	OMMANDS		
[Shift]	[PrtSc]	Clear screen	
[Alt]	Ð	Move screen right	
[Alt]	Ð	Move screen left	
[Alt]	Ŧ	Move screen up	
[Alt]	€	Move screen down	
LINE COM [Alt] [Alt] [Alt] [Alt]	/MANDS [Delete] [Insert] [Enter] [Tab] [Enter]	Delete line Insert line Center a line Paint Line Go to front of next line.	
CHARACTE	R COMMANDS		
	Ð	Right 1 character	
	Ð	Left1 character	
		Up 1 character	
	(†)	Down 1 character	
[Ctrl]	€	Right 1 cell	
[Ctrl]		Left 1 cell	
[Ctrl]	ſ	Up 1 cell	
[Ctrl]	Ŧ	Down cell	
[Alt] [Ctrl]	[Delete] [InsertT] [Backsp] [Space] [Space]	Delete character Insert character Backspace Paint character Alternate foreground & background	

GRAPHIC REFERENCE GUIDE



SECTION THREE. COMMUNICATIONS

COMMUNICATIONS

The communications feature (F-10) allows CG pages, Crawl Messages, and VCR schedules to be transferred from one QINGEN system to another. Information can be either sent or retrieved. This is done by using either the built in S-BUS port or with the optional QIN- 232TP via Modem or the RS-232 jumper cable. A brief overview of each method is provided below. Most people will only require one of the 1st two methods.

S-BUS PORT (Standard Feature)

The "S" port is the easiest, least expensive way to network the QINGEN. All QINGEN units come with the "S" port standard. The "S" port can be found on the back of the unit near its corresponding label. Note, while this port is used for transferring pages from one QINGEN System to another, it can also be used for VCR control. A 3.5 mm mono plug & cable are required for this procedure. (Not provided). Units may be networked at distances up to 50 ft. Up to four units may be hooked together simultaneously.

CONNECTION

- Connect the QINGENs together using a 1/8" mono plug inserted in the "S-BUS" jack of each unit. The unit does not need to be powered down while making this connection.
- 2). Follow the instructions under the heading called <u>COMMUNICATIONS</u> <u>OPERATION</u> found at the end of this section.

QIN-232TP MODEM TRANSFER (Optional Feature)

If you purchased the optional QIN-232TP, your QINGEN may be used with any HAYES compatible external modem. Two QINGEN Systems connected by standard telephone service can then transfer information across any distance. For best results, it is recommended that you have a dedicated phone line for each QINGEN (although it is not required). Up to 16 units may be connected using a single Modem. Consult your dealerforthe needed special cables and networking particulars if you wish to use multiple units with one modem.

CONNECTION

- Connect each QINGEN to it's external modem (D.Co. Part # QM-2400) using a "RS-232JC" (This cable is provided with the D.Co. Modem Part # QM-2400).
- 2). Connect each modem to the appropriate phone line.
- 3). Connect the power adapter for the Modem into the Wall Outlet.
- 4). On your keyboard hold down the (Alt)+ (Ctrl) keys while pressing (Delete). Or you may unplug and plug the main QINGEN unit back in. Thisisnecessary to initialize the system with the connected. and powered on. to let the computer know that the modem is present.
- 5). Follow the instructions under the heading called <u>COMMUNICATIONS</u> <u>OPERATION</u> found at the end of this section.

QIN-232TP HARDWIRE TRANSFFR (Optional Feature)

When fitted with the optional QIN-232TP the QINGEN System can be linked with as many as 16 units with a specially fitted RS-232 Cable. This allows for page transfers at an extremely high BAUD rate. When equipped with the optional QIN-232TP expansion board the QINGEN may transfer information using its RS-232port. Although not as easy to use as the "S-BUS" port, the RS-232 port offers increased transmission distances and increased networking capabilities The port uses a standard "DB-25" female connector which plugs into the RS-232 port in the back of each unit. Transmission distances of several hundred feet are possible **depending** on wire quality and baud rate. This method requires using special cables; consult your dealer for further details.

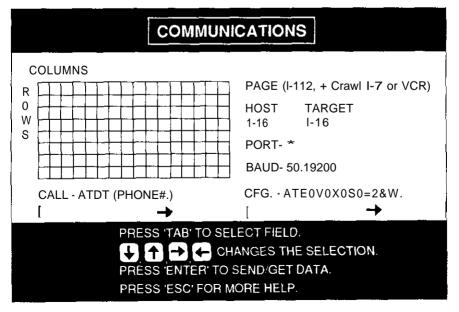
CONNECTION

- 1). Connect the QINGENs together by means of a "DB-25" cable (special order item) using the RS-232 Port in the back of each unit.
- 2). Follow the instructions under the heading called <u>COMMUNICATIONS</u> <u>OPERATION</u> found at the end of this section.

COMMUNICATIONS OPERATION

UNDERSTANDING THE COMMUNICATIONS MENU

Follow the steps below to become more familiar with this section of your QINGEN. Before proceeding it is highly recommended that the keyboard Scroll Lock be on. To confirm that it is on, the indicator light on the top right side of the keyboard should be lit.



SECTION THREE. COMMUNICATIONS

• SELECT BUS, RS-232, MODEM.

NOTE:

Home = TOP LEFT End = BOTTOM RIGHT SELECT ALL
■ CLEAR ALL

Press(**F10**) to access the communications menu.

As you can see the grid is divided into 128 boxes. These boxes are commonly referred to as cells in the computer world. Each one of these cells represents one page of the QINGEN. This Grid of Cells will keep track of which pages will (and won't) be transferred. Pages can be either <u>sent or retrieved</u> from the system you are working with to the other.

MOVING ABOUT THE COMMUNICATIONS GRID

When you first lookatthe Grid the top left box should be outlined in blue. (If you do not see a Blue Cursor on the grid use (Tab) repeatedly to Tab throughout the fields until the Blue Cursor appears on the grid). By using the Arrow Keys you can move around this grid. Notice that as you move the blue box (cursor) the 1st line on the top right of the screen displays the corresponding page which each cell represents. For example, position the Blue Cursor on the cell in the top left corner of the grid. Look over to the right side of the screen. you will see;

PAGE 1

Now press the ronce, you now see:

PAGE 2.

SELECTING PAGES TO BE TRANSFERRED

All of the cells in the grid should still be Orange colored at this point, if not, press (Page Down). Press (Insert).

Notice that the box you had the cursor positioned over is now Green in Color. The green color indicates that page will be transferred. Orange colored cells indicate those pages that will not be transferred. Backspace by pressing \bigcirc once. The Blue Cursor should now be over the green cell. Press (Delete). Notice that the cell is now orange again. This signifies that the indicated cell will not be transferred. By moving about the grid using the Arrow Keys (as described above) you use the Insert) to indicate that you want that particular page to be transferred. The Page Up can be used to mark ALL pages green and (Page Down can be used to mark all pages orange.

UNDERSTANDING THE GRID LANDSCAPE

In addition to transferring pages you can also transfer the crawl lines and VCR Schedule Information if your QINGEN has been fitted with the VCR controller option (Part # QIN-VCR). The cells in the 14th row represent the crawl lines 1 thru 7 and the VCR schedule information. (The cells in row 15 are currently not used.) To better understand this:

- Position the Blue Cursor on the very top left comer. This is PAGE 1. As is indicated to the right Now use to move to the right until the page display reads: PAGE 14.
- 2. Now press **Donce**. Notice the PAGE Display has been replaced to say: VCR SCHEDULE.

If you have purchased the VCR controller option for BOTH QINGEN systems. then this VCR Schedule can be sent or retrieved by using (Insert) to make this cell green.

Now press \bigoplus once. Notice the 1st comment fine now reads: CRAWL #1. Now slowly press the \bigoplus a few more times, as you do so. you will notice that CRAWL lines 1 thru 7 are represented in this row of cells with the top cell of the row representing the VCR Schedule.

FIELD SETTINGS

The following describes how to make an average transfer and should suffice for the average user. If you have a custom modem or network see the section CUSTOM FIELD SETTINGS.

MAKING A TRANSFER (default settings)

NOTE: The pages you marked will b-a sent with the PAGE ATTRIBUTES information for that page. Pages transferred with a PAGE IS OFF Dwell Time will not **display** on the program output of the destination unit. If you are sending pages to a unit and wish for them to appear in the sequence, then you must send them with all information currently set on the page attributes (F3) section for that page.

Once you have marked the pages (green cells) that you want transferred you must make sure the rest of the fields carry the proper instructions for the computer to execute. The fields are accessed using **(Tab)**

- Be sure you have connected you QINGEN according to the previous section. (Modem Users: you must initialize the system at this point if you have not already done so. Hold (Att) + (Ctrl) and press (Delete).
- 2). Select the pages you wish to transfer. Caution: When transferring pages the unit receiving the information will have its pages overwritten! All pages marked Green on the grid will erase any PAGE SCROLL LINE. or VCR SCHEDULE. Proper planning is very important.

SECTION THREE · COMMUNICATIONS

SCROLLLINE or VCR SCHEDULE Proper Planning is very important we highly recommend that you keep an Up to date log of each QINGEN units' pages. At the end of the Owners manual you will find a preprinted log for your convenience. Make copies and update it every time you make a change.

- 3A). S-Bus Transfer-If you are not using a modem make sure that the HOST and TARGET fields are both set to 1. The PORT field must be set to S-BUS. Then skip to step 6.
- 3B). Modem Transfer- If you are using a Modem- THE QINGEN HAS BEEN PRE-SET TO WORK WITH THE MODEM SUPPLIED BY D.Co (QM- 2400/SX212) YOU DO NOT NEED TO MAKE ANY CHANGES IF YOU HAVE THIS MODEM. THOSE DEFAULT SETTINGS SHOULD READ:

HOST TARGET

1. 1.

PORT - MODEM

BAUD- 2400

CALL - ATDT (PHONE#.)

CFG.- ATE0V0X0S0=2&W.

- (Note: The CFG [configuration field] won't show all of the string commands on the screen at once)
- 4). You may make changes if necessary by using (Tab) to reach a field. Then use the UP and RIGHT keys to make any changes to the HOST, TARGET, PORT, or BAUD fields.
- 5). We are now ready to dial up the other QINGEN system and transfer pages. Use the (Tab) to get the Blue Cursor to the CALL field. Use the to move past the ATDT and enter the phone number of the other QINGEN System (use the Number keys just below the Function keys. Do not use the Number keys on the keypad on the Right side of the keyboard.) Then type a period.

THIS IS VERY IMPORTANT YOU MUST INCLUDE A PERIOD AFTER THE PHONE #!

- 6). Press Enter This will display the SEND/GET DATA MENU
- You may now press:
 1. TO GET DATA
 0. TO SEND DATA
- 8). If you are using a modem the QINGEN will now dial the other QINGEN system and make the page transfer. (If you are not using a modem the transfer will immediately begin).

9). A series of comments will be displayed on the screen in the following order:

MAKING THE CALL CONNECTION MADE SENDING/GETTING THE DATA DATA HAS BEEN RECEIVED/SENT PRESS ANY KEY TO CONTINUE

As the pages are transferring you will see the Blue Cursor highlighting the cell representing the page that is being transferred. As each is sent the appropriate cell turns from green to white. Pages unsuccessfully transferred will remain green. Any error will be displayed at the bottom of the <u>screen</u>.

10). **Press F1** twice then use **1** and **1** to view the transmitted pages.

CUSTOM FIELD SETTINGS

HOST TARGET Field

The HOST and TARGET I.D. numbers will normally be assigned a default value of 1. However, in cases when more than two QINGEN units are employed in a network. the I.D. number specifies a particular unit that will be targeted as either a source or destination of information to be transferred. The I.D. numbers may be adjusted fmm I-16.

To assign an I.D. number. use the **Tab** to reach the field. Then use the Arrow keys to adjust the I.D. number.

In thesecases a QINGEN targets the HOST I.D. number of the unit with which it will exchange pages. In other words, if you have a master unit at one location that you wish to use to program several different units in a single attached network, you would initially set each of the network units with a unique HOST I.D. number. Then when making a transfer from the master unit by changing the TARGET I.D. number you can talk with or exchange information with each unit in the network independently.

PORT Field

The PORT field specifies which communications port the QINGEN will utilize for the transfer. Each of the three options are described at the beginning of the COMMUNICATIONS SECTION. This field may be set according to your needs by using the tab to reach the field and using the Arrow keys to select the appropriate port.

BAUD Field

On units equipped with an expansion board (QIN-232TP), the BAUD field adjusts the BAUD rate for information transfer. The BAUD value may be adjusted from OFF to 19200 bits per second. The BAUD rate is ignored when using the

S-BUS. When using the RS-232 PORT without a modem set the SAUD rate to 19200. When using an external modem set the SAUD rate to the setting specified according to the modem manufacturer. To adjust the baud rate Tab t this field then use the Arrow keys to adjust the setting. 1200 is the default setting when a QIN232TP board is present.

CALL Field

On units equipped with an expansion board (QIN-232TP). the call field is used with an external modem to tell the QINGEN what phone number to call along with additional information that tells the modem how to operate.

The alphanumeric string may be up to 32 characters long and will scroll out of view as it is entered. The Arrow keys may be used to move about the string. To entre the call string. use **Tab** to reach the CALL field. Then simply type the string into the field. The following string will usually suffice with most Hayes compatible modems: ATD Timmediately followed by the phon enumber you are trying to reach, and then a period. The CALL field can be used to transmit a variety of information to it's external modem. See your modem's operation manual for details on other commands.

CFG (configuration) Field

On units equipped with expansion board (QIN-232TP). the CFG feature is used when connecting the **QINGEN** with a Hayes Compatible external modem. The CFG field is an alphanumeric string of information that the QINGEN outputs to it's external modem in order to configure it to receive calls and communicate with the QINGEN correctly. The alphanumeric string may be up to 32 characters long. It has been preset for you at the factory and should suffice for most modems If not, consult your modem manual.

SPECIFICATIONS	
Pages:	112
Colors:	16
Character Sizes:	4
Wipe Patterns:	6
Page Display Time:	1-99 seconds adjustable
Format:	NTSC Standard Outputs (2)
	(1 .0 VPP into 75 ohms)
outputs:	2 F type (program. preview)
Power Supply:	115VAC.60Hz
Power Consumption:	Average watts 15, Amps .125
Chassis:	19" Rack Mountable
Dimensions: 2.62 Weight: 7	5"H x 19-W x 5"D
NOTE: All specifications a	nd features are subject to change without notice.