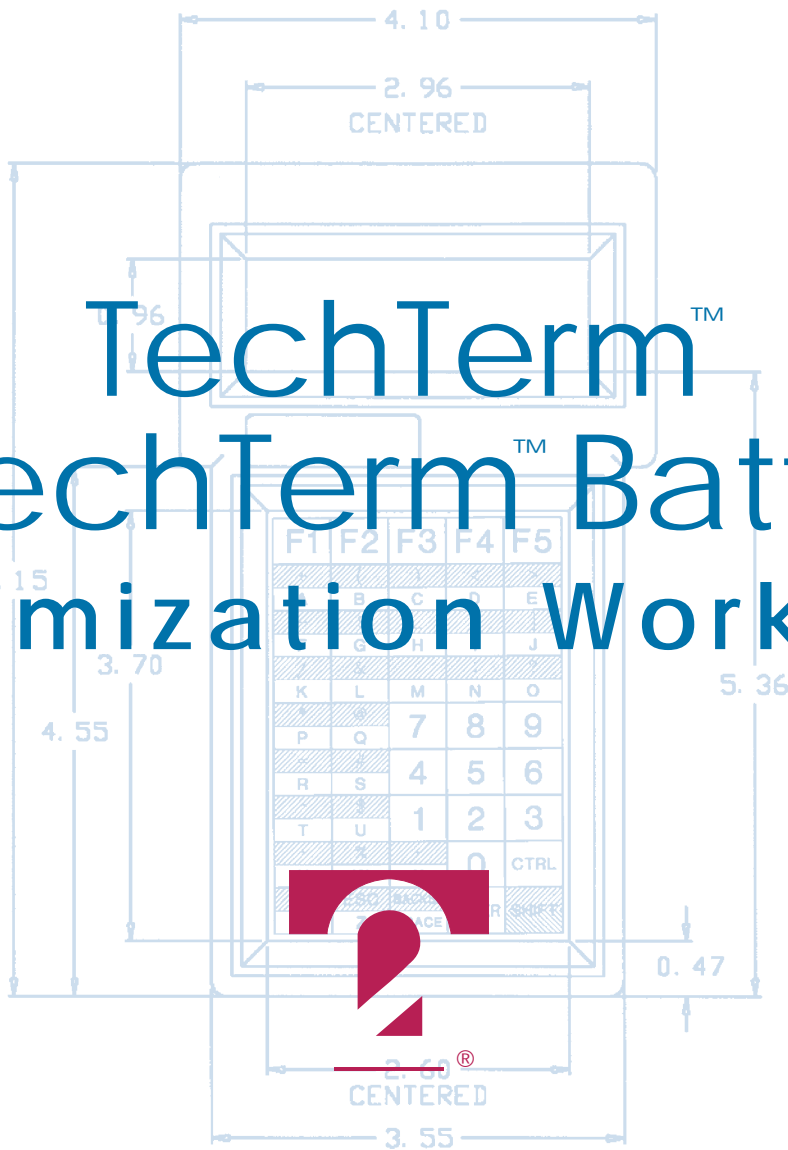
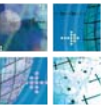




# TechTerm™ & TechTerm™ Battery Customization Workbook





Thank you for downloading the customization booklet for the TechTerm™ . Our objective is to supply you with the highest quality hand held computer products available—with all the custom features required for your unique application.

This workbook provides easy-to-use templates to customize the TechTerm for your application. To get started, just fill in your name and contact information and let the customization begin! If you have questions, just give us a call at 215.441.5305 and ask for Customer Service. No question is too simple when it comes to creating your masterpiece.

If you will not be providing camera-ready artwork, please sketch in the desired graphics and return the appropriate sheets indicating the particular items to be customized. Two Technologies uses the Pantone Matching System® Colors (uncoated colors only) to match all colors. Pantone® color guides are available at virtually any art supply store, or our customer service team can help you in selecting colors that best match your product or corporate colors.

The following features are customizable on the TechTerm:

- Case Color
- Keypad
- Logo tag
- Serial Tag
- Display
- Cable
- Custom defaults
- Custom key outputs
- Custom firmware
- Backlit or Phosphorescent keypad
- Boot

We look forward to the opportunity to work with you on this project. Rest assured, we will provide you with a hand held computer you are proud to put your name on.

---

**Name:**

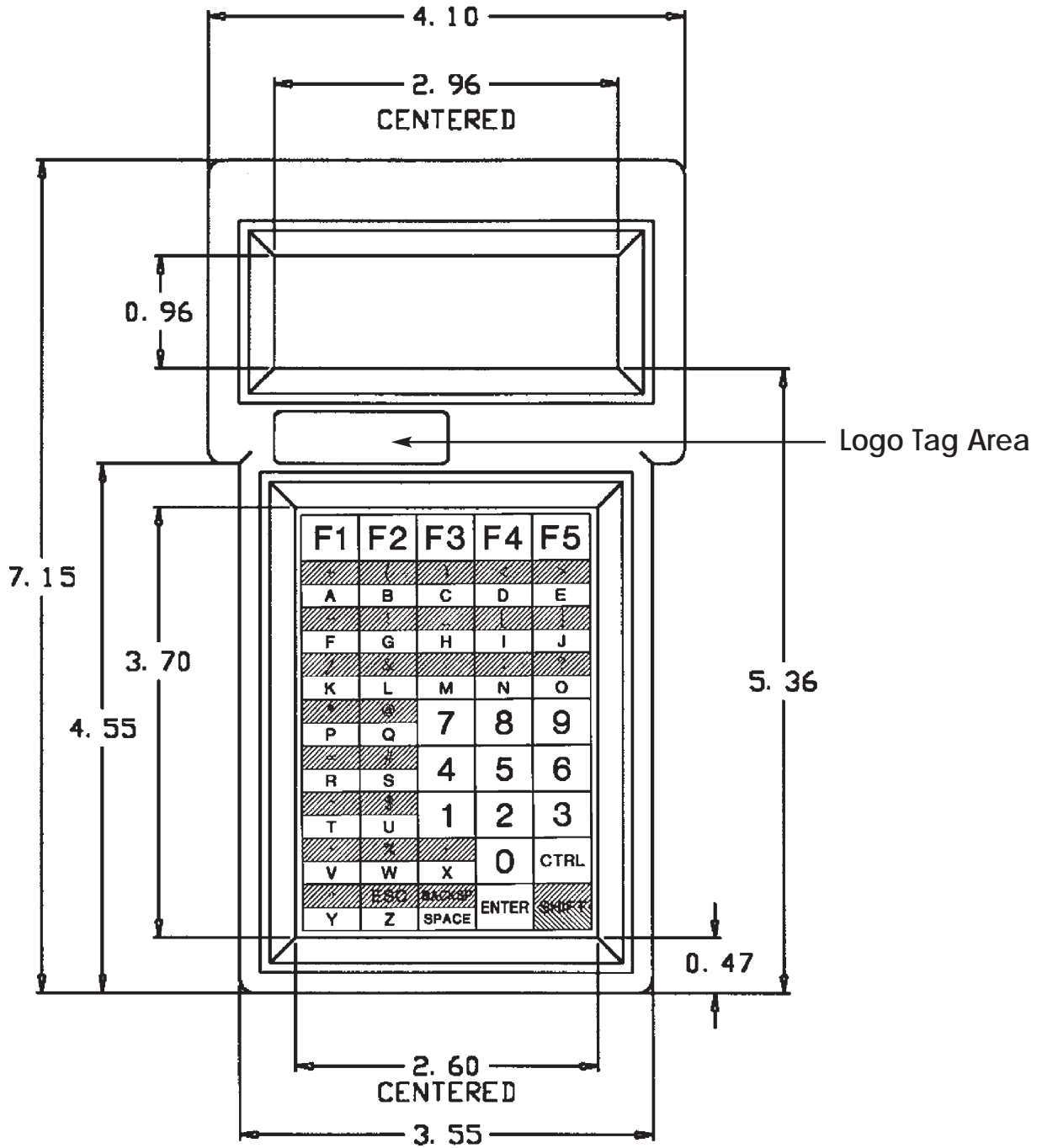
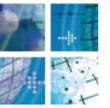
**Title:**

**Company:**

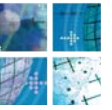
**Telephone Number:**

**E-Mail Address:**

# Case Dimensions



# Layout Sample



Draw in your logo and indicate the PANTONE® color(s).



Logo Tag

NOTE: Please provide us with camera-ready artwork if your corporate or product logo is required.

*NOTE: You don't need to be the next Leonardo da Vinci. Just pick-up a pen or a pencil and jot down your ideas. When you're happy with your layout, just fax it over. We have graphic designers who will turn your sketches into a masterpiece!*

## EXAMPLE:

Pantone Color(s):

1. *F1 = PMS 215*
2. *Text = Black*
3. *BKgrd = PMS Cool Gray 3*

Font & Point Size:

*Times New Roman 24 Pt.*

## EXAMPLE:

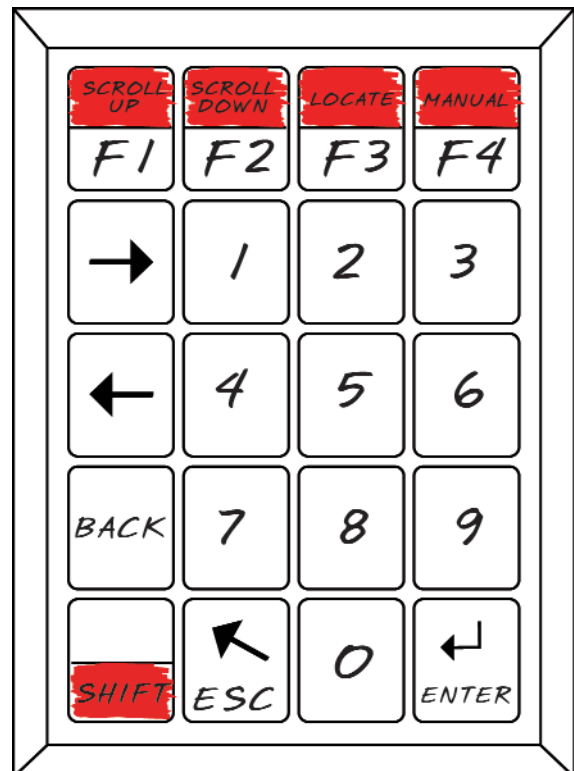
Pantone Color(s):

1. *Text = Black*
2. *BKgrd = PMS Cool Gray 3*

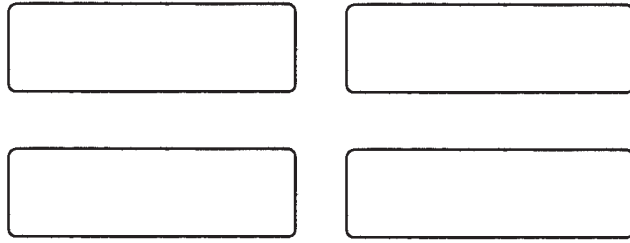
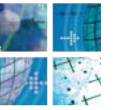
Font & Point Size:

*Times New Roman 24 Pt.*

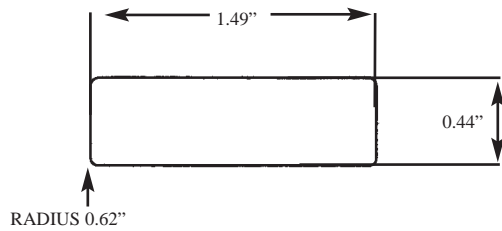
Draw in your keypad and indicate the PANTONE® color(s).



# Logo Tag Layouts



Scale 1:1



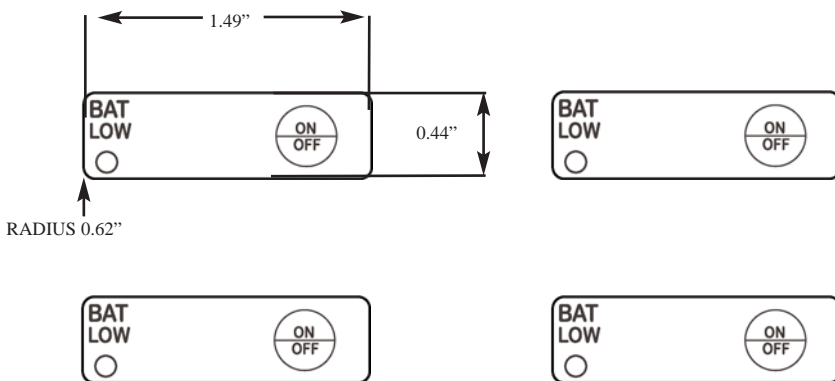
Pantone Color(s):

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

Font & Point Size:

\_\_\_\_\_

## Battery Logo Tag



Scale 1:1

Pantone Color(s):

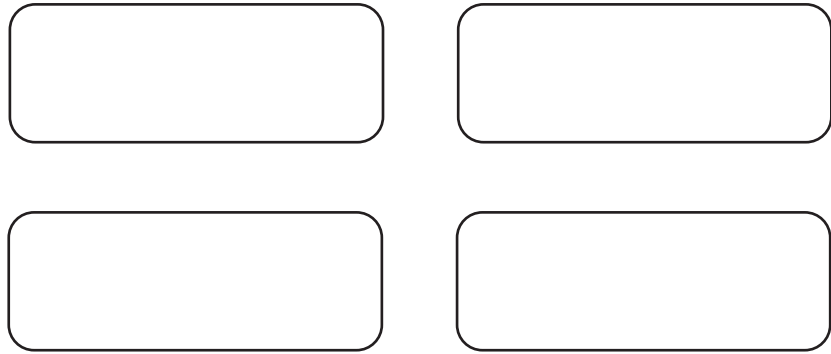
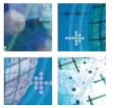
1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

Font & Point Size:

\_\_\_\_\_

NOTE: LED is in a fixed position. Red LED is standard

# Serial Tag Layout

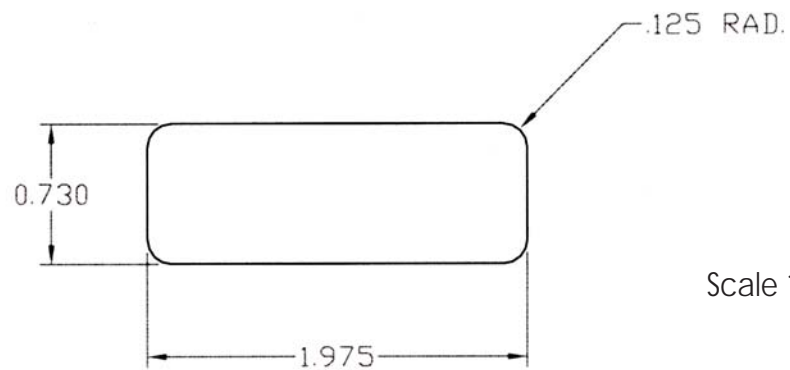


Pantone Color(s):

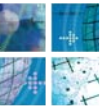
1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

Font & Point Size:

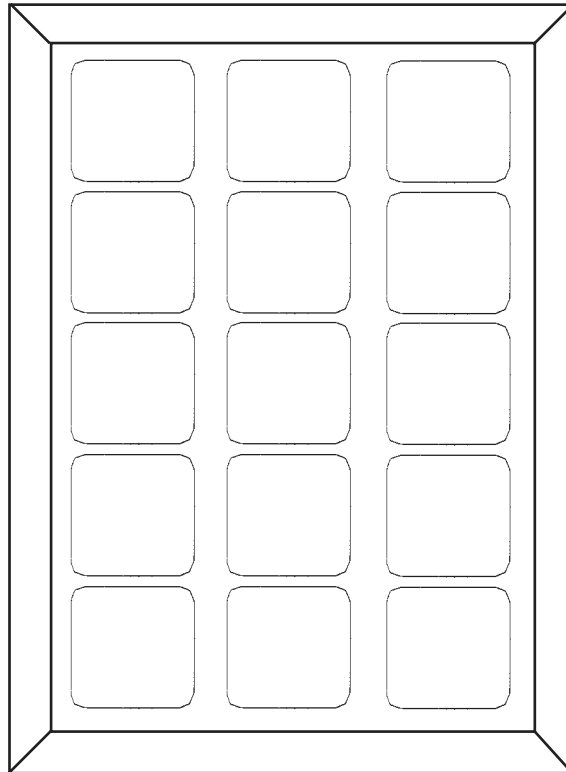
\_\_\_\_\_



# 15-Key Membrane



Scale 1:1



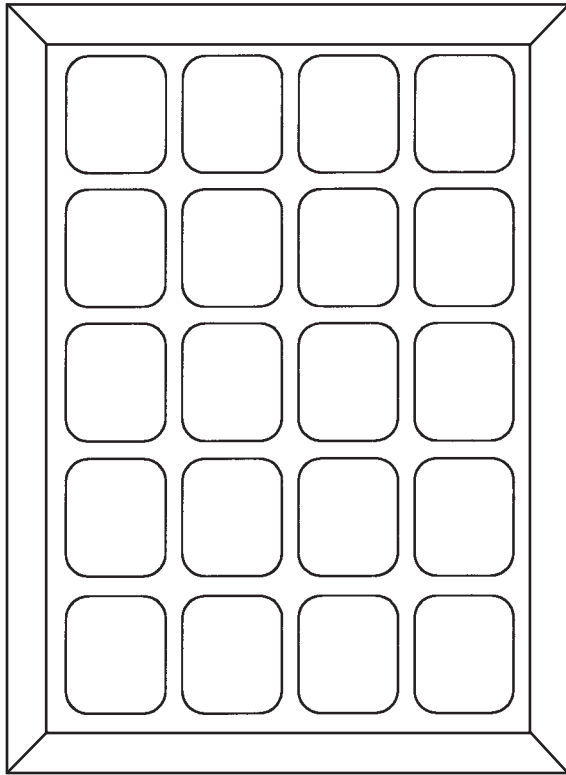
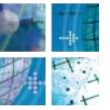
**Pantone Color(s):**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

**Font & Point Size:**

\_\_\_\_\_

# 20-Key Membrane



Pantone Color(s):

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_
- 5. \_\_\_\_\_
- 6. \_\_\_\_\_

Font & Point Size:

\_\_\_\_\_

## 20-Key Elastomeric

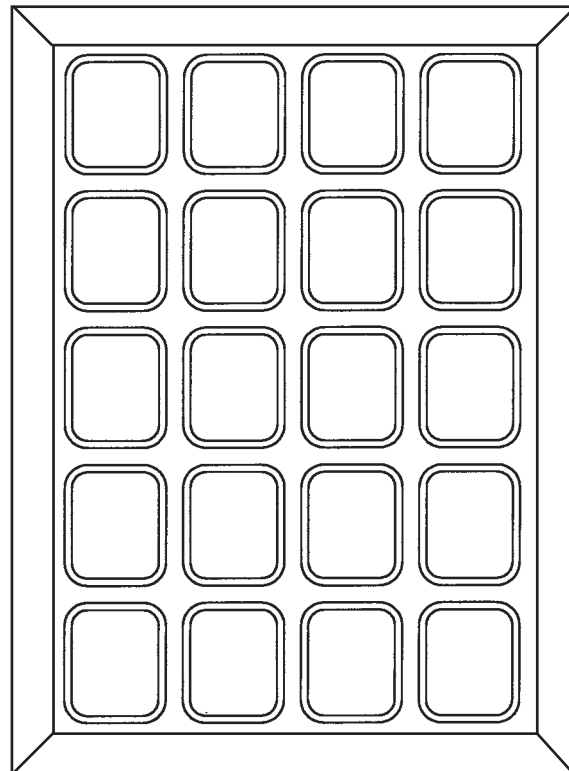
Scale 1:1

Pantone Color(s):

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_
- 5. \_\_\_\_\_
- 6. \_\_\_\_\_

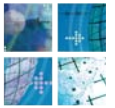
Font & Point Size:

\_\_\_\_\_

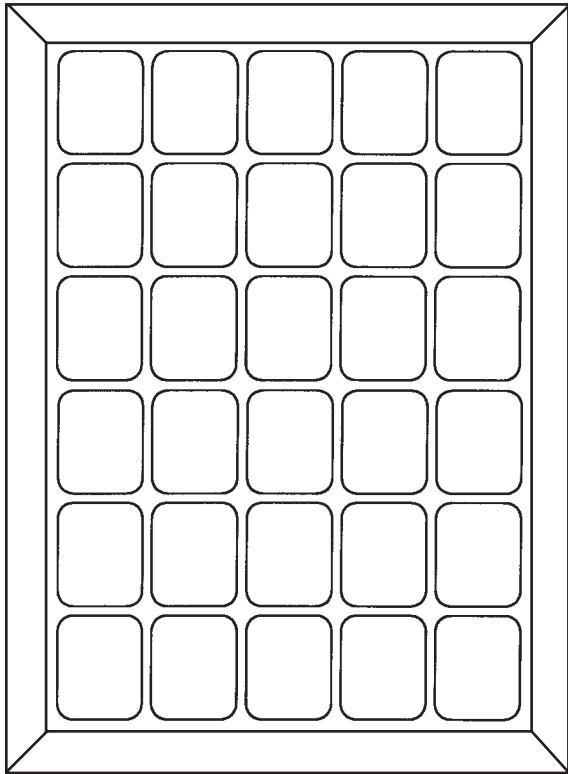




# 30-Key Membrane



Scale 1:1



Pantone Color(s):

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

Font & Point Size:

\_\_\_\_\_

## 30-Key Elastomeric

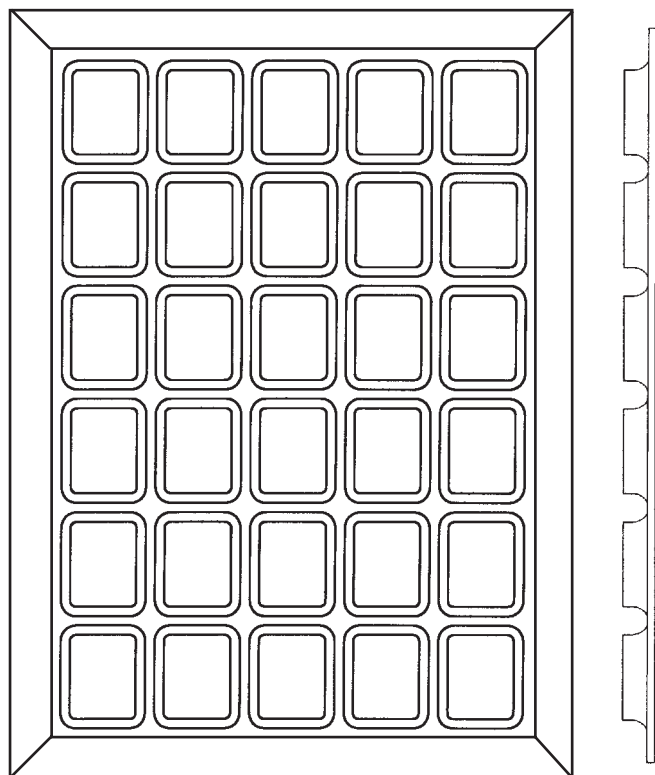
Scale 1:1

Pantone Color(s):

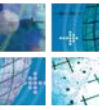
1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

Font & Point Size:

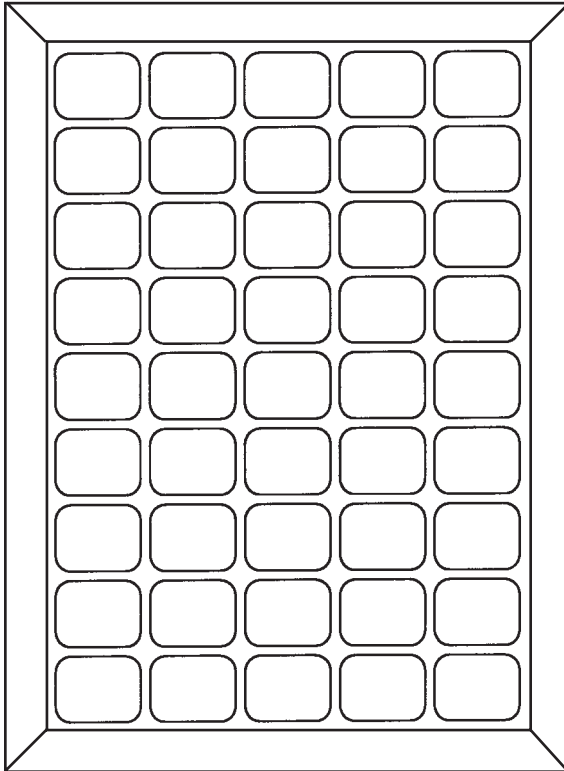
\_\_\_\_\_



# 45-Key Membrane



Scale 1:1



Pantone Color(s):

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

Font & Point Size:

\_\_\_\_\_

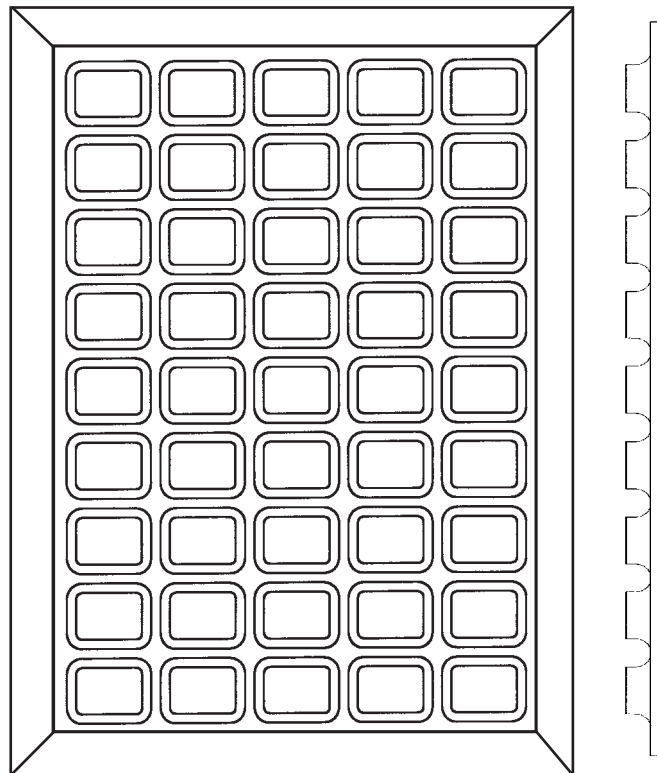
## 45-Key Elastomeric

Pantone Color(s):

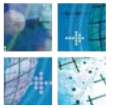
1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

Font & Point Size:

\_\_\_\_\_



# 15-Key Custom Keycode Layout



KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)
C1	_____	C2	_____	C3	_____
S1	_____	S2	_____	S3	_____
U1	_____	U2	_____	U3	_____
C6	_____	C7	_____	C8	_____
S6	_____	S7	_____	S8	_____
U6	_____	U7	_____	U8	_____
C11	_____	C12	_____	C13	_____
S11	_____	S12	_____	S13	_____
U11	_____	U12	_____	U13	_____
C16	_____	C17	_____	C18	_____
S16	_____	S17	_____	S18	_____
U16	_____	U17	_____	U18	_____
C21	_____	C22	_____	C23	_____
S21	_____	S22	_____	S23	_____
U21	_____	U22	_____	U23	_____

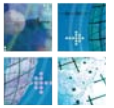
## PREFIX

"C" = CTRL Key output  
 "S" = SHIFT Key output  
 "U" = Single Key output

## NOTES:

- Check if CTRL function is disabled
- Check if SHIFT function is disabled

# 20-Key Custom Keycode Layout



KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)
C1	_____	C2	_____	C3	_____	C4	_____
S1	_____	S2	_____	S3	_____	S4	_____
U1	_____	U2	_____	U3	_____	U4	_____
C6	_____	C7	_____	C8	_____	C9	_____
S6	_____	S7	_____	S8	_____	S9	_____
U6	_____	U7	_____	U8	_____	U9	_____
C11	_____	C12	_____	C13	_____	C14	_____
S11	_____	S12	_____	S13	_____	S14	_____
U11	_____	U12	_____	U13	_____	U14	_____
C16	_____	C17	_____	C18	_____	C19	_____
S16	_____	S17	_____	S18	_____	S19	_____
U16	_____	U17	_____	U18	_____	U19	_____
C21	_____	C22	_____	C23	_____	C24	_____
S21	_____	S22	_____	S23	_____	S24	_____
U21	_____	U22	_____	U23	_____	U24	_____

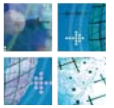
**PREFIX**

"C" = CTRL Key output  
 "S" = SHIFT Key output  
 "U" = Single Key output

- Check if CTRL function is disabled
- Check if SHIFT function is disabled

**NOTES:**

# 20-Key Standard Hex Output Table

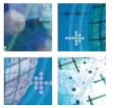


KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)
C1 S1 U1	41	C2 S2 U2	42	C3 S3 U3	43	C4 S4 U4	44
C6 S6 U6	31	C7 S7 U7	32	C8 S8 U8	33	C9 S9 U9	2B
C11 S11 U11	34	C12 S12 U12	35	C13 S13 U13	36	C14 S14 U14	2D
C16 S16 U16	37	C17 S17 U17	38	C18 S18 U18	39	C19 S19 U19	08
C21 S21 U21	2E	C22 S22 U22	30	C23 S23 U23	20	C24 S24 U24	0D

**PREFIX**

"C" = CTRL Key output  
 "S" = SHIFT Key output  
 "U" = Single Key output

# 30-Key Custom Keycode Layout



KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)
C1	_____	C2	_____	C3	_____	C4	_____	C5	_____
S1	_____	S2	_____	S3	_____	S4	_____	S5	_____
U1	_____	U2	_____	U3	_____	U4	_____	U5	_____
C6	_____	C7	_____	C8	_____	C9	_____	C10	_____
S6	_____	S7	_____	S8	_____	S9	_____	S10	_____
U6	_____	U7	_____	U8	_____	U9	_____	U10	_____
C11	_____	C12	_____	C13	_____	C14	_____	C15	_____
S11	_____	S12	_____	S13	_____	S14	_____	S15	_____
U11	_____	U12	_____	U13	_____	U14	_____	U15	_____
C16	_____	C17	_____	C18	_____	C19	_____	C20	_____
S16	_____	S17	_____	S18	_____	S19	_____	S20	_____
U16	_____	U17	_____	U18	_____	U19	_____	U20	_____
C21	_____	C22	_____	C23	_____	C24	_____	C25	_____
S21	_____	S22	_____	S23	_____	S24	_____	S25	_____
U21	_____	U22	_____	U23	_____	U24	_____	U25	_____
C26	_____	C27	_____	C28	_____	C29	_____	C30	_____
S26	_____	S27	_____	S28	_____	S29	_____	S30	_____
U26	_____	U27	_____	U28	_____	U29	_____	U30	_____

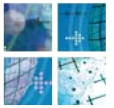
**PREFIX**

"C" = CTRL Key output  
 "S" = SHIFT Key output  
 "U" = Single Key output

- Check if CTRL function is disabled
- Check if SHIFT function is disabled

**NOTES:**

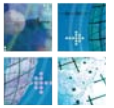
# 30-Key Standard Hex Output Table



KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)
C1	01	C2	02	C3	03	C4	04	C5	05
S1	11	S2	12	S3	13	S4	14	S5	15
U1	41	U2	42	U3	43	U4	44	U5	45
C6	06	C7	07	C8	08	C9	09	C10	0A
S6	2F	S7	28	S8	31	S9	32	S10	33
U6	46	U7	47	U8	48	U9	49	U10	4A
C11	0B	C12	0C	C13	0D	C14	0E	C15	0F
S11	2A	S12	29	S13	34	S14	35	S15	36
U11	4B	U12	4C	U13	4D	U14	4E	U15	4F
C16	10	C17	11	C18	12	C19	13	C20	14
S16	2D	S17	23	S18	37	S19	38	S20	39
U16	50	U17	51	U18	52	U19	53	U20	54
C21	15	C22	16	C23	17	C24	18	C25	19
S21	2B	S22	2C	S23	3D	S24	30	S25	2E
U21	55	U22	56	U23	57	U24	58	U25	59
C26	1A	C27	--	C28	--	CTRL		SHIFT	
S26	1B	S27	08	S28	0D				
U26	5A	U27	20	U28	0D				

**PREFIX**  
 "C" = CTRL Key output  
 "S" = SHIFT Key output  
 "U" = Single Key output

# 45-Key Custom Keycode Layout



KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)
C1 S1 U1	____ ____ ____	C2 S2 U2	____ ____ ____	C3 S3 U3	____ ____ ____	C4 S4 U4	____ ____ ____	C5 S5 U5	____ ____ ____
C6 S6 U6	____ ____ ____	C7 S7 U7	____ ____ ____	C8 S8 U8	____ ____ ____	C9 S9 U9	____ ____ ____	C10 S10 U10	____ ____ ____
C11 S11 U11	____ ____ ____	C12 S12 U12	____ ____ ____	C13 S13 U13	____ ____ ____	C14 S14 U14	____ ____ ____	C15 S15 U15	____ ____ ____
C16 S16 U16	____ ____ ____	C17 S17 U17	____ ____ ____	C18 S18 U18	____ ____ ____	C19 S19 U19	____ ____ ____	C20 S20 U20	____ ____ ____
C21 S21 U21	____ ____ ____	C22 S22 U22	____ ____ ____	C23 S23 U23	____ ____ ____	C24 S24 U24	____ ____ ____	C25 S25 U25	____ ____ ____
C26 S26 U26	____ ____ ____	C27 S27 U27	____ ____ ____	C28 S28 U28	____ ____ ____	C29 S29 U29	____ ____ ____	C30 S30 U30	____ ____ ____
C31 S31 U31	____ ____ ____	C32 S32 U32	____ ____ ____	C33 S33 U33	____ ____ ____	C34 S34 U34	____ ____ ____	C35 S35 U35	____ ____ ____
C36 S36 U36	____ ____ ____	C37 S37 U37	____ ____ ____	C38 S38 U38	____ ____ ____	C39 S39 U39	____ ____ ____	C40 S40 U40	____ ____ ____
C41 S41 U41	____ ____ ____	C42 S42 U42	____ ____ ____	C43 S43 U43	____ ____ ____	C44 S44 U44	____ ____ ____	C45 S45 U45	____ ____ ____

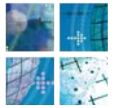
**PREFIX**  
 "C" = CTRL Key output  
 "S" = SHIFT Key output  
 "U" = Single Key output

- Check if CTRL function is disabled
- Check if SHIFT function is disabled

**NOTES:**



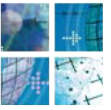
# 45-Key Standard Hex Output Table



KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)	KEY	OUTPUT (HEX)
C1	66	C2	67	C3	68	C4	69	C5	6A
S1	61	S2	62	S3	63	S4	64	S5	65
U1	11	U2	12	U3	13	U4	14	U5	15
C6	01	C7	02	C8	03	C9	04	C10	05
S6	2B	S7	28	S8	29	S9	3C	S10	3E
U6	41	U7	42	U8	43	U9	44	U10	45
C11	06	C12	07	C13	08	C14	09	C15	0A
S11	2D	S12	21	S13	5F	S14	5B	S15	5D
U11	46	U12	47	U13	48	U14	49	U15	4A
C16	0B	C17	0C	C18	0D	C19	0E	C20	0F
S16	2F	S17	26	S18	3A	S19	3B	S20	3F
U16	4B	U17	4C	U18	4D	U19	4E	U20	4F
C21	10	C22	11	C23	--	C24	--	C25	--
S21	2A	S22	40	S23	37	S24	38	S25	39
U21	50	U22	51	U23	37	U24	38	U25	39
C26	12	C27	13	C28	--	C29	--	C30	--
S26	3D	S27	23	S28	34	S29	35	S30	36
U26	52	U27	53	U28	34	U29	35	U30	36
C31	14	C32	15	C33	--	C34	--	C35	--
S31	5E	S32	24	S33	31	S34	32	S35	33
U31	54	U32	55	U33	31	U34	32	U35	33
C36	16	C37	17	C38	18	C39	--	<b>CTRL</b>	
S36	2C	S37	25	S38	2E	S39	30		
U36	56	U37	57	U38	58	U39	30		
C41	19	C42	1A	C43	--	C44	--	<b>SHIFT</b>	
S41	22	S42	1B	S43	08	S44	0D		
U41	59	U42	5A	U43	20	U44	0D		

## PREFIX

"C" = CTRL Key output  
 "S" = SHIFT Key output  
 "U" = Single Key output



Please check off only **ONE** box for each default parameter selection!

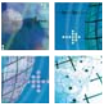
Note: Underlined Boxes  indicate standard factory default settings.

## Default Parameter Settings

1. **Baud Rate (bits/second):**     300    600    1200    2400    4800    9600
2. **Data Bits:**                     7    8
3. **Parity:**                          Even    Odd    Mark    Space    Ignore
4. **Display PE:**                     Enable    Disable
5. **Repeat:**                         Slow    Medium    Fast    Disabled    None
6. **Echo:**                             Enable    Disable
7. **Handshake (hardware):**     Enable    Disable
8. **SELF TEST**                     Enable    Disable
9. **POWER SAVER<sup>1</sup>**                Enable    Disable

1. Only appears on battery-powered units.

# Cable Design Form



## Cable Types

- Straight Cable - Round Jacket     Straight Cable - Flat Jacket  
 Coiled Cable - Round Jacket     Coiled Cable - Flat Jacket

## Cable Length

- 7 Foot     15 Foot     Custom - Length= \_\_\_\_\_

## Cable Color

- Black     Gray  
 Other (Custom) \_\_\_\_\_

## Shielding

- Unshielded     Shielded  
Shield Termination at Host \_\_\_\_\_  
Shield Termination at Terminal \_\_\_\_\_

## Wire Size

- 26GA (Std. for all cables)  
 Other (Custom) \_\_\_\_\_

## Custom Connector Information

Connector Type: \_\_\_\_\_

Connector Manufacturer: \_\_\_\_\_

Manufacturer Part No: \_\_\_\_\_

Qty: \_\_\_\_\_

- Sketch Attached     Sample Attached

# Connector Pin Outs



(Required at time of order)

RS-232

<u>Terminal</u>	<u>YOUR CORRESPONDING PINS</u>
1 +Supply to Terminal	_____
2 Handshake into Terminal	_____
3 Handshake out from Terminal	_____
4 Data into Terminal	_____
5 Data out from Terminal	_____
6 Common	_____

RS-422

<u>Terminal</u>	<u>YOUR CORRESPONDING PINS</u>
1 +Supply to Terminal	_____
2 +Data into Terminal	_____
3 +Data out from Terminal	_____
4 -Data into Terminal	_____
5 -Data out from Terminal	_____
6 Common	_____

RS-485

<u>Terminal</u>	<u>YOUR CORRESPONDING PINS</u>
1 +Supply to Terminal	_____
2 Not Used	_____
3 +Data	_____
4 Not Used	_____
5 -Data	_____
6 Common	_____