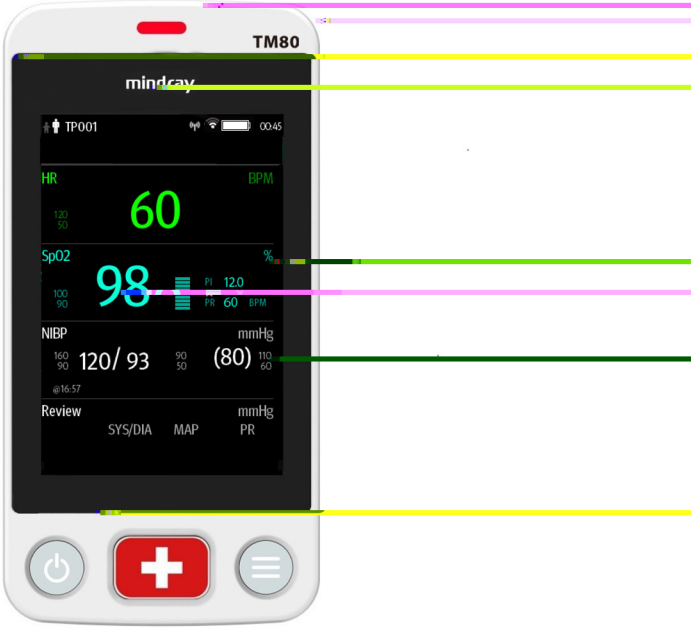
BeneVision TM80

Telemetry Monitor

Q- ick Reference G- ide



mindray

Note: The TM80 Q· ick Reference G· ide i no in ended a a replacemen o he Opera ing In r· c ion . Prior o opera ing eq· ipmen , he · er m· be familiar \ i h he Opera ing In r· c ion Man· al con en . Thi doc· men i a g· ideline onl o be · ed a an aid o comprehen i, e In er, ice Training.

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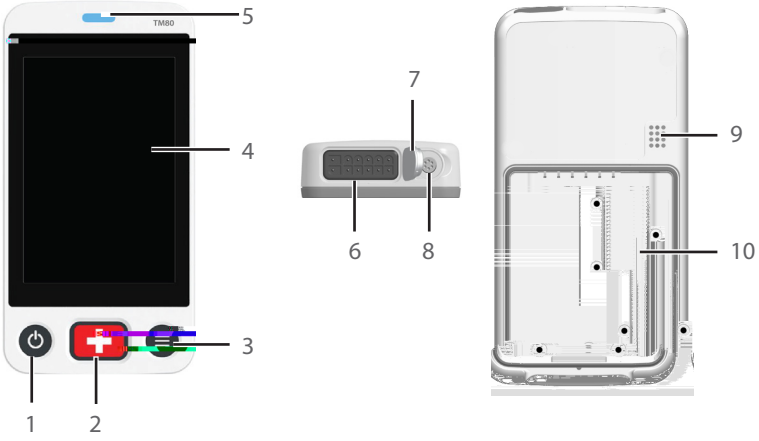
TM80 PHYSICAL VIEW



1. Di pla Ac i, a ion (Pa er On/Off) ke

   When he TM80 i pa ered off

   , Pre ing hi ke \ ill · rn he TM80 on.

   When he TM80 i pa ered on

   , And he creen di pla i on, pre ing hi ke \ ill · rn he di pla off.
   , And he creen di pla i off, pre ing hi ke \ ill · rn he di pla on.
   , Pre and hold hi ke for \ o econd o di pla he pa er off confirma ion men· .

   Note: When he TM80 i di connec ed from he Cen ral Moni oring S em (CMS), i di pla i al a on. Yo· canno · rn i off.

2. N· r e Call ke

   N· r e call ke ac i, a e n· r e call me age a he CMS.

3. Main Men· ke

   , Pre ing hi ke \ hen on he main creen\ ill open he main men· .
   , Pre ing hi ke \ hen a men· i open\ ill re · rn o he main creen.
   , Pre ing hi ke \ hen he di pla i off\ ill · rn he di pla on.

, Pre ing hi ke \ hen he creen lock mode i config- red for Vie Onl \ ill di pla he **Screen Locked** men- .

4. Di pla

   To- ch creen di pla for , ie ing pa ien informa ion and adj- ing pa ien e ing .

5. Pa ien alarm ligh indica or

6. ECG lead connec or

7. SpO_2 cap

   Co, er SpO_2 connec or\ hen SpO_2 i no in- e.

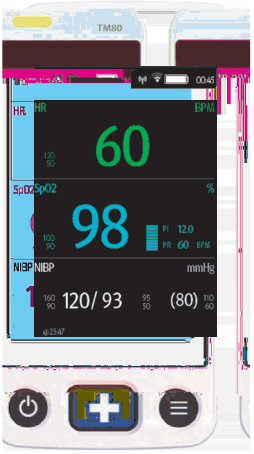
8. SpO_2 connec or

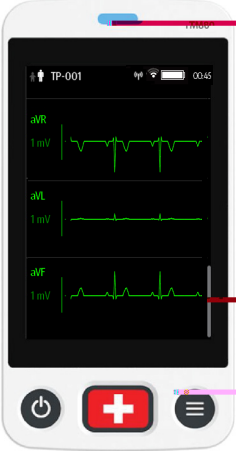
   Connec he SpO_2 mod- le.

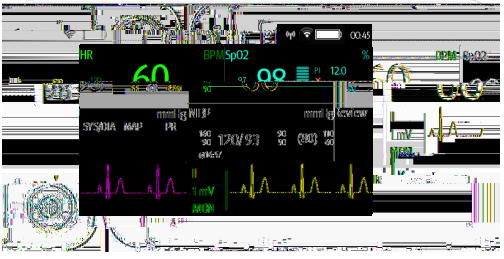
9. Speaker

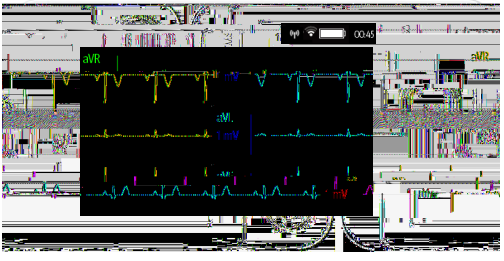
10. Ba er compar men

    Con ain he li hi- m-ion ba er pack or AA ba er ra .


TM80
HR
60
SpO2
98
NIBP
120/ 93
(80)

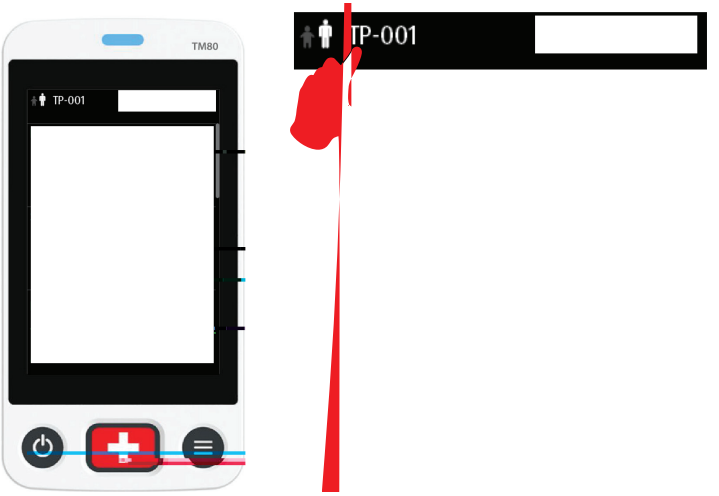

TP-001
aVR
1 mV
aVL
1 mV
aVF
1 mV



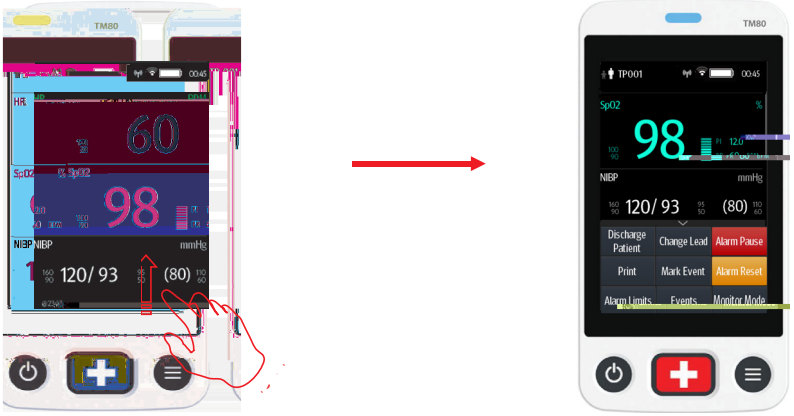


View More Data

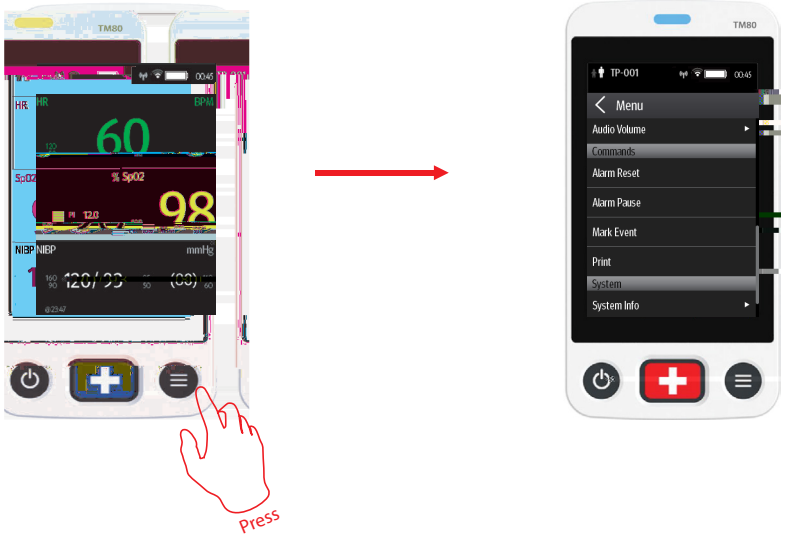
The TM80 pro, ide he follo ing hor c- o acce addi ional informa ion, a ho n in he follo ing fig- re :



Quick Key Deployment/Screen Menu Bar Deployment



Note: The q- ick ke are config- rable. The e image are j- repre en a i, e.



PATIENT SETUP

Admit

Af er di charging he pre. io- pa ien , o- can admi a ne pa ien b pre ing .

Discharge

Di charging he pa ien \ ill op moni oring, clear pa ien informa ion, and re ore defa- l (pre e) e ing on he TM80.

A pa ien can be di charged b elec ing he **Discharge Patient** men- .

Note: Di charging he pa ien on he TM80 di charge he pa ien from he CMS.

Select the Discharge Patient menu

1. Pre o en er he main men- .
2. Tap **Discharge Patient**.
3. Selec **Yes**.
   - The pa ien i di charged from bo h he TM80 and he CMS.
   - The pa ien config- ra ion i cleared and he config- ra ion i re ored o he a. ed - er config- ra ion or fac or defa- l config- ra ion.
   - The pa ien \ ill be added o he di charged pa ien li a he CMS .
4. Pre o admi a ne pa ien .

Adjust Patient Category

The Pa ien Info men- allo he clinician o adj- he pa ien ca egor .

Note: En - re he pa ien ca egor elec ion i appropria e for he pa ien before moni oring begin . The - ppor ed pa ien ca egorie are Ad- l and Pedia ric.

To adj- he pa ien ca egor :

1. Pre o en er he main men- .
2. Tap **Patient Info**.
3. Tap **Patient Category** o elec he pa ien ca egor .
4. Selec **Yes** o confirm ha he pa ien ca egor ho- ld be changed.
   The elec ed pa ien ca egor di pla o he righ of **Patient Category**.
5. Pre o re - rn o he main creen.

Note: The pa ien ca egor can onl be changed on he TM80.

Note: Adj- ing pa ien ca egor re ore he TM80 o he defa- l (pre e) e ing b- doe no clear pa ien informa ion or da a.

Note: When he de, ice i connec ed o he CMS, he pa ien ca egor a he CMS i - pda ed if he pa ien ca egor i changed on he TM80.

STANDBY

Enter Standby

Placing a de, ice in o S andb :

- S- pend pa ien moni oring.
- Alarm are - pended.
- Di pla **Standby** on he creen.
- The creen di pla a- oma icall - rn off af er he de, ice en er he S andb mode for 30 econd .

Note: When connec ed o he CMS, and a de, ice en er or e i S andb mode, he CMS i al o no ified o en er or e i S andb mode.

To en er S andb mode:

1. Pre o en er he main men- .
2. Tap **Standby**.
3. Selec **Yes** o confirm he de, ice ho- ld en er S andb mode.

Resume Monitoring

- Re ore pa ien e ing , re - me alarm no ifica ion on he TM80 and he CMS.
- Alarm em i ac i, a ed.
- The TM80 no ifie he CMS of re - rning o Moni oring mode.

To e i S andb mode:

Pre ◯

ECG

Select ECG Leadwire

The TM80 allo he clinician o e he ECG Lead ire T pe being - ed. To config- re he ECG Lead ire T pe:

On he main creen, ap he HR digi al area or ECG\ a. eform area o en er he **ECG** men- .

OR

1. Pre o en er he main men- .
2. Tap **Parameter Setup**.
3. Tap **ECG**.
4. Selec **Cable Type**.
5. Selec
   - **Auto**: he de. ice a- oma icall e he lead ire pe according o he lead connec ed.
   - **3 Lead**: o elec 3-lead ire e
     If he lead ire pe i e o 3-lead, he **Smart Lead** op ion become **Monitored Lead**. The clinician can elec he preferred lead from he **Monitored Lead**.
   - **5 Lead**: o elec 5-lead ire e
     All ECG lead di pla on he main creen.
   - **6 Lead**: o elec 6-lead ire e
     If he lead ire pe i e o 6-lead, bo h he **Va** and **Vb** are elec able.
6. Pre o re - rn o he main creen.

Lead Placement

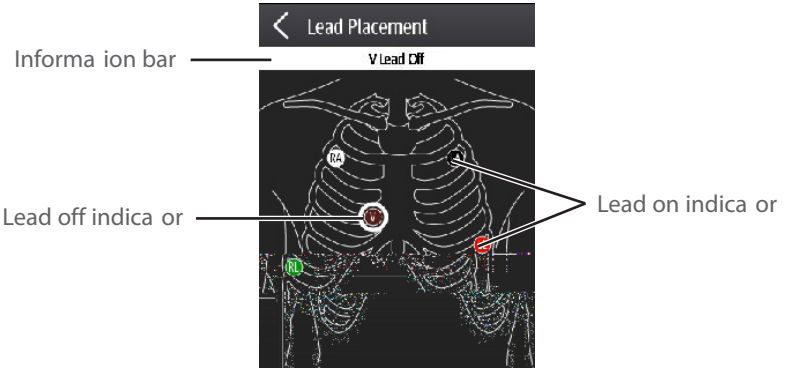
The TM80 Lead Placemen men- allo he clinician o check he ECG Lead S a - and ro- ble hoo Lead Fa- l me age . To en er he Lead Placemen men- :

Tap he lead off me age on he main creen.

OR

Pre o en er he main men- , and hen ap **Lead Placement**.

The Lead Placemen \ indo indica e he lead a - .



When an of he lead are off, he indica ion are a follo :

- The lead off me age di pla on he informa ion bar.
- The backgro- nd color of he informa ion bar corre pond o he alarm le. el.
- A fla hing circle indica e he di connec ed lead.
- The color of he fla hing circle i ba ed on he alarm le. el.

Enable Pacer

The TM80 allo he clinician o enable pacemaker de ec ion. The mbol di pla in he \ a. eform area on he CMS\ hen he pacemaker de ec ion in enabled.

To enable he pacemaker de ec ion on he TM80:

- On he main creen, elec he HR digi al area or ECG\ a. eform area o en er he **ECG** men- .

OR

1. Pre o en er he main men- .
2. Tap **Patient Info**.
3. Tap **Paced** o enable Pacer b elec ing **Yes**.
4. Pre o re - rn o he main creen.

RESP (OPTIONAL)

Set NCM Alarm Delay

The TM80 allo config· ring he de ired ime for **NCM Alarm Delay**. When he pa ien ha opped brea hing for longer han he e **NCM Alarm Delay** ime, he TM80 ill rigger he "No Che Mo, emen " alarm.

To e **NCM Alarm Delay**:

On he main creen, ap he Re p digi al area or Re p a, eform area o en er he **Resp** men· .

OR

1. Pre o en er he main men· .
2. Tap **Parameter Setup**.
3. Tap **Resp**.
4. Se **NCM Alarm Delay**.

Note: The "No Che Mo, emen " alarm i di pla ed on he Cen ral Moni oring S em onl .

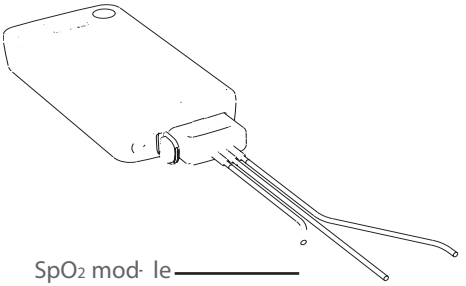
Note: The Re p f· nc ionali for he TM80 eleme r moni or i a, ailable a he CMS ho e , er ion i 03.00 and abo, e onl .

SpO2 (OPTIONAL)

The TM80 allo con in· o· p· l e o ime r .

Connect the SpO2 Module

Connec he SpO2 mod· le o he TM80 a ho n in he follo ing fig· re.

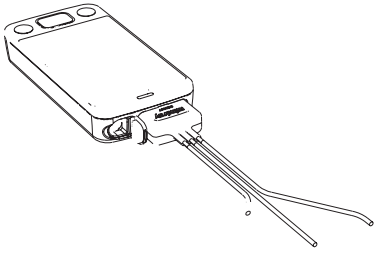


SpO2 mod- le

SpO2 en or connec or

SpO2 en or

Connec ing he Ma imo SpO2 mod- le



Connec ing he Nellcor SpO2 mod· le

Initiate the SpO2 Measurement

1. Connec he en or o he SpO2 mod· le and he SpO2 mod· le o he TM80.
2. Selec an appropria e en or according o he pa ien i e, and\ eigh .
3. Prepare he SpO2 i e in accordance\ i h ho pi al polic .
3. Appl he en or o he pa ien .

   The SpO2 mea · remen \ ill di pla \ hen he SpO2 mod· le acq· ire a ignal from he pa ien .

NIBP (OPTIONAL)

The TM80 allo non-in. a i. e blood pre - re (NIBP) moni ored b a BP10 NIBP mod- le.

Pair a TM80 with a BP10

1. Pre he MPAN ke on he righ panel of he BP10. The Pairing... me age\ ill di pla in he me age area of he BP10.
2. Pre o en er he main men- .
3. Tap **Wireless Modules.**
4. Tap **MPAN** and hen elec **Connect to BP10.**

   The TM80 ar earching he BP10 de. ice in he . icini and di pla he de. ice ha can be connec ed - nder **Devices.** Make - re ha he de. ice o- \ i h o connec appear in he li of de. ice . If no , repea S ep 1 o 4.
5. In he li of de. ice , elec o- r de ired de. ice and ap **Connect**. Once he de. ice i connec ed - cce f- ll , he a - \ ill be changed from **Disconnect** o **Connected**.
6. Tap an \ here in he NIBP digi al area on he main creen o acce he **NIBP** men- .
7. Tap **Start** o ar NIBP mea - remen . Verif ha he NIBP mea - remen re - l di pla ed a he BP10 are con i en \ i h ha di pla ed on he main creen of he TM80 and are he da a for he ame pa ien .

Pair a TM80 with a New BP10

1. Unpair he TM80\ i h he BP10 alread connec ed b follo ing ep in **Unpair a TM80 with a BP10 via the TM80** or **Unpair a TM80 with a BP10 via the BP10.**
2. Pair he TM80\ i h o- r de ired BP10 b follo ing ep in **Pair a TM80 with a BP10**.

Unpair a TM80 with a BP10 via the TM80

Op ion 1:

1. Pre o en er he main men· .
2. Tap **Wireles Modules**.
3. Selec he de, ice o· \ i h o di connec from he TM80 from he de, ice li · nder **Devices** and ap **Disconnect**.

   The connec ed de, ice i di connec ed from he TM80.

Op ion 2:

1. Pre o en er he main men· .
2. Tap **Wireles Modules**.
3. Tap **MPAN**.
4. Selec **Off**.

Unpair a TM80 with a BP10 via the BP10

1. Pre he MPAN ke on he BP10.
2. Selec **Yes**\ hen he promp me age A**re you sure you want to close MPAN and unpair BP10**? appear .

Caution: Before mo, ing a TM80 or BP10 o ano her area, · npair hem fir .

Caution: Before admi ing a ne pa ien a a BP10, o· need o · npair i \ i h a TM80 fir .

ALARMS

Alarm Status Symbols

Symbol	Description
	All he alarm are pa· ed.
	A· dible alarm one are · rned off.
	Alarm are ackno ledged and he alarm em i re e .

Change Parameter Alarm Properties

1. En er he **Alarm Limits** men- in ei her of he follo ing\ a :
   - Selec he **Alarm Limits** q- ick ke .
   - Pre o en er he main men- → ap **Alarms** → ap **Alarm Limits**.
2. Tap a parame er and e i alarm proper ie .

Change Arrhythmia Alarm Settings

1. En er he **Arrhythmia Alarm Setup** men- in ei her of he follo ing\ a :
   - Tap he **Arrhythmia Alarm Setup** q- ick ke , if i i con g- red in he q- ick ke area.
   - Pre o en er he main men- → ap **Alarms** → ap **Arrhythmia Alarm Setup**.
2. Tap a parame er and e i alarm proper ie .

Pause Alarms

1. Pre o en er he main men- .
2. Tap **Alarm Pause** from he **Commands** ec ion.

OR

When **Alarm Pause** i config- red a a Q- ick ke , o- can

1. S ipe - p o- r finger a he bo om of he main creen o di pla he q- ick ke area.
2. Tap he **Alarm Pause** q- ick ke .

Reset Alarms

To ilence *an alarm for the duration of the alarm* on he TM80 and he CMS:

1. Pre o en er he main men- .
2. Tap **Alarm Reset** from he **Commands** ec ion.

OR

When **Alarm Reset** i config- red a a Q- ick ke , o- can

1. S ipe - p o- r finger a he bo om of he main creen o di pla he q- ick ke area.

2. Tap he **Alarm Reset** q- ick ke .

Af er he alarm em i re e , depending · pon he em config- ra ion, he alarm em re pond a follo :

For ph iological alarm :

- The alarm o- nd\ ill be ilenced.
- The mbol appear on he op of he main creen.
- A , \ ill appear before he alarm me age., indica ing ha he alarm i ackno ledged.
- The color of he parame er n- meric backgro- nd corre pond \ i h he alarm priori , b- he parame er n- meric doe no fla h..

For echnical alarm :

- Some echnical alarm are cleared and no alarm indica ion are gi en.
- Some echnical alarm are changed o promp me age .
- For ome echnical alarm , he alarm o- nd\ ill be ilenced, he alarm ligh \ ill con in- e o indica e he alarm, a , \ ill appear before he alarm me age.
- For ome echnical alarm , he mbol appear on he op of he main creen.

REVIEW

Review Events

- Selec **Events** from he q- ick ke area.

OR:

1. Pre o en er he main men- .
2. Tap **Review**.
3. Tap **Events**.

Review Tabular Trends

- Tab **Tabular Trends** in he · pper righ corner of he e en re ie page.

OR:

1. Pre o en er he main men- .
2. Tap **Review**.
3. Tap **Tabular Trends**.

SCREEN DISPLAY

Switch Orientation

1. S ipe o- r finger do n from he op of he main creen o di pla he follo ing b- on .
   - : hi b- on i di pla ed in por rai orien a ion. l \ i che por rai di pla o land cape di pla co- n erclock i e.
   - : hi b- on i di pla ed in por rai orien a ion. l \ i che por rai di pla o land cape di pla clock i e.
   - : hi b- on i di pla ed in land cape orien a ion. l \ i che land cape di pla in, er el .
   - : hi b- on i di pla ed in land cape orien a ion. l \ i che land cape di pla o por rai di pla .
2. Tap he de ired op ion o \ i ch he creen di pla orien a ion.

Adjust Display Order

The TM80 allo he clinician o adj- he parame er order on he main di pla . To adj- he di pla order:

1. Pre o en er he main men- .
2. Tap **Display Setup**.
3. To e por rai di pla orien a ion, ap **Portrait Order.**

   To e land cape di pla orien a ion, ap **Landscape Order**.
4. Tap a parame er or\ a, eform

   The parame er icon di pla o he righ .
5. Drag he elec ed parame er o he de ired po i ion and relea e.
6. Repea ep 4 and 5 a needed.
7. Pre o re - rn o he main creen.

SCREEN LOCK/VIEW ONLY MODE

The TM80 pro, ide he abili o lock he o- ch creen di pla o re ric - er acce , op ion for Vie Onl and Locked are a, ailable. Vie Onl allo pa ien da a o be , ie ed b- pre, en acce o e ing \ i ho- a pa code. Locked req- ire a pa code for an acce o he TM80.

Enable the Screen Lock

Af er he fir ime creen lock i enabled, a pa code i req- ired.

To enable he creen lock:

1. Pre o en er he main men- .
2. Tap **Maintenance**.
3. En er main enance pa \ ord.
4. Tap **Accept**.
5. Tap **Screen Lock** o elec a creen lock mode: **Locked** or **View Only**.
6. En er he creen lock pa code.

   The elec ed lock mode i di pla ed o he righ of **Screen Lock**.
7. Pre o re - rn o he main creen.

Unlock the Screen in Locked Mode

3. En er he pa code o - nlock he creen.
   Once he pa code i en ered he creen i emporaril - nlocked. If he clinician - rn off he TM80 or he di pla ime o- , he pa code\ ill need o be re-en ered.

ADJUST VOLUMES

The clinician i able o adj- alarm ¸ ol- me , ke ¸ ol- me , and QRS ¸ ol- me on he TM80.

To adj- he ¸ ol- me e ing :

1. Pre o en er he main men- .
2. Tap **Audio Volume**.
3. Selec he ca egor o adj- and drag he lider o he appropria e ¸ ol- me.
4. Pre o re - rn o he main creen.

PARAMETER COLORS

The TM80 pro¸ ide he abili o adj- he parame er n- meric and\ a¸ eform (if applicable) color.

To adj- he parame er color a he TM80:

1. Pre o en er he main men- .
2. Tap **Parameter Setup**.
3. Tap he parame er.
4. Tap **Color**.
5. Selec he color.
6. Pre o re - rn o he main creen.

Note: The parame er color config- ra ion on he TM80 and he CMS are independen .

CLEAN/DISINFECT THE TM80

Clean the TM80

Clean o- r eq- ipmen on a reg- lar ba i . Before cleaning, con - l o- r ho pi al reg- la ion for cleaning he eq- ipmen .

Caution: Ne, er immer e he li hi- m-ion ba er pack, AA ba er ra and AA ba erie in an fl- id .

Before cleaning o- r TM80, make he follo ing prepara ion:

- In all he ba er pack or ba er ra and firml clo e o eal he ba er compar men .
- In er he SpO2 co, er in he SpO2 connec or, hen SpO2 i no in - e.
- In er he ECG lead ire pl- g in o he ECG connec or.

The follo ing able li appro, ed cleaning and di infec ing agen .

Product Name	**Product Type**	**Ingredients**
Sodi- m h pochlori e bleach*	Liq- id	Sodi- m h pochlori e bleach 10%
H drogen pero ide*		H drogen pero ide 3%
I opropanol*		I opropanol 70%
1-Propanol*		1-Propanol 50%
Me re Ca, iCide1,		Dii ob- lpheno e ho e h l dime h l ben l ammoni- m chloride 0.28%, I opropanol 17.2%
Vire ll 256		Didec l dime h l ammoni- m chloride 8.704%, n-Alk dime h l ben l ammoni- m chloride 8.190%
Vire TB		n-Alk l dime h l ben l ammoni- m chloride 0.105%, n-Alk l dime h l e h lben l ammoni- m chloride 0.105%
Rel +On, Virkon Pa der *(U ed a 1% ol- ion)	Pa der	U ed a 1% ol- ion Biocidal ac i, e: Pen apo a i- m bi (pero mono - lpha e) bi (- lpha e)(500g/kg), Con ain dipo a i- m pero odi - lpha e.

Product Name	Product Type	Ingredients
Alpe D2 S· rface Sani i ing Wipe	Wipe	I oprop l Alcohol 58.6000% Oc l Dec l Dime h l Ammoni· m chloride 0.0075%, Dioc l Dime h l Ammoni· m Chloride 0.0030%
Cloro Di pa ch Ho pi al Cleaner Di infec an Ta el \ i h Bleach		Sodi· m H pochlori e 0.65%
Cloro Heal hcare Bleach Germicidal Wipe		Sodi· m H pochlori e 0.55%
Cloro Heal hcare H drogen Pero ide Cleaner Di infec an Wipe		H drogen Pero ide 1.4%
Di, er e O i, ir TB Wipe		H drogen Pero ide 0.5%
Me re Ca, iWipe ,		Dii ob· lpheno e ho e h l dime h l ben l ammoni· m chloride 0.28%, I opropanol 17.2%
PDI Sani-Clo h AF3 Germicidal Di po able Wipe		n-Alk l dime h l e h lben l ammoni· m chloride 0.14%, n-Alk l dime h l ben l ammoni· m chloride 0.14%
PDI Sani-Clo h Bleach Germicidal Di po able Wipe		Sodi· m H pochlori e 0.63%,o her ingredien 99.37%
PDI Sani-Clo h HB Germicidal Di po able Wipe		n-Alk l dime h l e h lben l ammoni· m chloride 0.07%, n-Alk l dime h l ben l ammoni· m chloride 0.07%

Product Name	Product Type	Ingredients
PDI Sani-Clo h Pl· Germicidal Di po able Clo h	Wipe	n-Alk l dime h l e h lben l ammoni· m chloride 0.125%, n-Alk dime h l ben l ammoni· m chloride 0.125%
PDI S· per Sani-Clo h Germicidal Di po able Wipe*		n-Alk l dime h l e h lben l ammoni· m chloride 0.25%, n-Alk l dime h l ben l ammoni· m chloride 0.25%, l oprop l Alcohol 55.0%,
VIRAGUARD Ho pi al S· rface Di infec an		l opropanol 70%,O her ingredien 30%

Note: For eq· ipmen \ i h he mbol , all he li ed cleaning and di infec ing agen are a, ailable for · e. For eq· ipmen \ i ho· he mbol , onl he cleaning and di infec ing agen marked\ i h * are a, ailable for · e.

To clean he eq· ipmen :

1. Sh· da n he de, ice.
2. Clean he di pla creen\ i h\ ipe or a of clo h moi ened\ i h one of he cleaning agen li ed in he able abo, e.
3. Clean he e erior · rface of he eleme r moni or main · ni and li hi· m-ion ba er pack\ i h\ ipe or a of clo h moi ened\ i h one of he cleaning agen li ed in he able abo, e.
4. Wipe off all he re id· e\ i h a dr clo h.
5. Dr o· r eq· ipmen in a , en ila ed, cool place.

Disinfect the TM80

Di infec o· r eq· ipmen a req· ired in o· r ho pi al er, icing ched· le · ing one of he di infec ing agen li ed in he able abo, e. Cleaning he eq· ipmen before di infec ing i recommended.

CLEAN/DISINFECT REUSABLE ACCESSORIES

To clean and di infec re- able ECG lead ire and SpO_2 en or , refer o he in r- c ion for - e deli, ered\ i h he acce or .

STERILIZATION

S erili a ion i no recommended for hi eq- ipmen , rela ed prod- c , acce orie or - pplie - nle o hex i e indica ed in he in r- c ion for - e deli, ered\ i h he prod- c , acce orie or - pplie .

Mindra DS USA, Inc.
800 MacAr h· r Bo· le. ard, Mah ah, Ne Jer e 07430 USA
Tel: 1.800.288.2121, 1.201.995.8000
\ \ \ .mindra .com

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